QUALITY CONTROLS
CATALOGUE



Fortress Diagnostics

Fortress Diagnostics

How To Order

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fortressdiagnostics.com/contact-us

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Advancing Global Diagnostics

Fortress Diagnostics is a well-established, multi award-winning IVD manufacturer based in the United Kingdom, supplying an extensive portfolio of products to over 100 countries worldwide.

We have been providing our distributors and end users with high quality products for over 20 years. The objective of Fortress Diagnostics is to provide the highest level of diagnostic solutions, globally, through continued investment in research and development.

Why choose Fortress Diagnostics?

Our proven product performance, matched with our selection of reputable distribution partners, has been instrumental in our continued success and growth. Built on a culture of quality and performance, we are committed to providing our customers with a reliable service and results they can trust.

Our ISO 13485:2016 certification for the design, development, manufacturing and distribution of in vitro diagnostics (IVD) medical reagents and instrumentation endorses our product range and ensures that the highest quality standards are constantly maintained.

Through our global distribution network, we provide highly accurate medical testing solutions to immunology, haematology and serological laboratories in hospitals, medical centres, clinics, blood banks and research institutions in over 100 international markets.

Hosting an in-house Research and Development team, we are committed to creating the next innovative IVD solutions to exceed our customer's requirements and advance the healthcare industry. We reinvest over 30% of our turnover in R&D every year.

Fortress Quality Controls & Calibrators

Quality controls and calibrators play a vital role in clinical diagnostics by ensuring the accuracy and reliability of test results. Quality controls are designed to monitor the performance of diagnostic assays and reagents, helping to detect any variations or issues that may arise during testing. This ongoing assessment ensures that laboratories maintain high standards and can identify problems before they affect patient care. Calibrators, on the other hand, are used to establish the measurement accuracy of diagnostic instruments by providing a known reference point against which test results can be compared.

Together, these elements contribute to standardisation and consistency in laboratory testing, fostering confidence in the results provided to healthcare professionals. Ultimately, robust quality control and calibration processes are essential for delivering precise diagnoses, guiding effective treatment decisions, and ensuring patient safety in clinical practice.

Fortress Quality Controls (**Seraqual**) are supplied with instrument and method specific assigned values. We can also provide quality control solutions, tailor-made to customer specification and requirements, enabling laboratories to be more efficient and reduce costs. We also work with many universities, research institutions and laboratories to develop quality control and calibration solutions for unique and novel biomarkers.

The Seraqual Portfolio

Fortress Diagnostics Seraqual Controls and Calibrators are available for:

- Antioxidants
- Aqueous Standards
- Blood Gas & Electrolytes
- Cardiac
- Clinical Chemistry
- Coagulation/Haemostasis
- Diabetes
- Drugs of Abuse
- Haematology
- Immunoassay/ Infectious
- Immunology/Proteins
- Lipids
- Maternal Screening
- Neonatal Screening
- Paediatric Screening
- Speciality Controls
- Thalassaemia
- Therapeutic Drugs
- Torch
- Paediatric
- Urine
- Xanthochromia

Why Choose Fortress Quality Controls & Calibrators?

1 

Customer Support

Fortress Diagnostics employ a highly-skilled team of technical support staff to assist customers with all their needs and technical questions. We are always on-hand to help.

2 

Cost Saving

Our Quality Controls Range have a wide-ranging analyte content, enabling laboratories to consolidate their quality control purchases and therefore benefit from cost savings.

3 

Accurate

Manufactured by Fortress Diagnostics in our ISO 13485:2016 accredited labs, Seraqual products are designed to provide highly accurate target, values mimicking human samples, with minimal matrix effects being observed.

4 

Reliable

Our fully in-house logistics team enables us to ship orders globally and our customer support team are available to assist with any labs' special requirements or custom orders to ensure customer satisfaction is always exceeded.

5 

Third Party Controls Suitable For Global Market

We manufacture a wide range of third party controls which are value-assigned, without bias, towards any methods or instrumentation, enabling labs to meet their ISO accreditations through accurate and robust training.

6 

High Quality

Seraqual products are manufactured without the use of preservatives or stabilisers, utilising human-based material, which have undergone stringent quality checks for HIV, HBsAg, HCV, HTLV, and Syphilis for FDA approved methods. Products of animal origin are not added in the Fortress controls, therefore eliminating the lack of specificity in antibody-based tests.

7 

Flexible

As well as offering an extensive range of controls, Fortress Diagnostics has the ability to manufacture custom quality control products to meet any customer requirements providing a fully flexible solution.

8 

Long Shelf Life

Fortress Diagnostics offer quality controls in two different formats - lyophilised (stable for up to 4 years) and liquid (stable with a shelf life of up to 18 months) - enabling labs to utilize lot supply and save costs.

9

Traceability

Fortress Controls and Calibrators are CE marked and fully traceable to the reference material according to ISO 17511 and ISO 18153 directives.

10

Consolidation

Fortress Quality Controls offer a wide parameter range allowing more analyte coverage with a single control.

11

Value Assignment

The Fortress value assignment involves six European Reference Laboratories, (chosen on the basis of the analytes performed in these laboratories), each of which performs five independent runs.

12

Compatibility

Fortress Controls are made from human derived material, with minimal matrix effects being observed.

Find Out More



Website

fortressdiagnostics.com

The Fortress Diagnostics website details our full product range, allowing users to add products of interest to a "Quote Request" which is sent directly to our sales team. We regularly post blogs, event information, resources and company updates.

Quality Control Inserts Portal

insert.fortressdiagnostics.com

Fortress Diagnostics are excited to launch the new Fortress QC Inserts Portal. The portal allows customers to easily search our database of quality control inserts by product name, catalogue number or batch number in our easy-to-use filter tool. Inserts can be viewed online or downloaded in PDF format.





Brochures & Catalogues

fortressdiagnostics.com/resources

All Fortress Diagnostics brochures and catalogues can be viewed and downloaded on the Fortress Resource Hub in PDF format.

Videos

youtube.com/@fortressdiagnostics

Subscribe to our YouTube channel to explore information videos, tutorial guides for Seraqual 365, interviews for World Awareness Days and more.

Social Media

Explore and follow our social media pages across **Instagram**, **LinkedIn**, **Facebook** and **Twitter**. We regularly post updates on product launches, events Fortress are exhibiting at, news from the world of diagnostics and company developments.

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SECTION 1

ANTIOXIDANTS

Antioxidant Controls

Antioxidant quality controls in diagnostics are crucial for ensuring the accuracy and reliability of tests that measure oxidative stress and antioxidant levels in biological samples.

These quality controls are used to validate the performance of diagnostic assays, ensuring that the test results are consistent and accurate. Positive controls, which contain known quantities of antioxidants, help confirm that the assay is working correctly, while negative controls, without antioxidants, ensure there is no false detection of antioxidant activity.

The Fortress Seraqual Antioxidant Quality Controls are lyophilised for enhanced stability, offer excellent accuracy and precision and cover a range of key antioxidants in clinical practice. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Glutathione Peroxidase Control

- This control is presented in a Lyophilised format stable to expiry date at 2-8 °C.
- Reconstituted stability 3 days at 2-8 °C.
- 100% Human based.

Description	Size	Cat No.	Type
Glutathione Peroxidase Calibrator	5 x 1 ml	BXC0557A	Lyo
Glutathione Peroxidase Control	5 x 1 ml	BXC0556A	Lyo

Glutathione Reductase Calibrator & Control

- Fortress Glutathione Reductase Controls are intended for monitoring accuracy and precision.
- Calibrators and Controls are supplied in a Lyophilised format stable up to expiry at 2-8 °C.
- Reconstituted stability 7 days at 2-8 °C or 3 days at 25 °C.
- 100% Human based.

Description	Size	Cat No.	Type
Glutathione Reductase Calibrator	5 x 1 ml	BXC0999A	Lyo
Glutathione Reductase Control	5 x 1 ml	BXC0460A	Lyo

Superoxide Dismutase Control

- The Control is presented in Lyophilised format stable to expiry date at 2-8 °C.
- Reconstituted stability of 7 days at 2-8 °C.
- 100% Human based.

Description	Size	Cat No.	Type
Superoxide Dismutase Calibrator	5 x 1 ml	BXC0434A	Lyo
Superoxide Dismutase Control	5 x 1 ml	BXC0433A	Lyo

Total Antioxidant Status Calibrator & Control

- 100% Human based.
- Reconstituted stability of 7 days at 2-8 °C.

Description	Size	Cat No.	Type
Total Antioxidant Status (TAS) Calibrator	1 x 1 ml	BXC0555A	Lyo
Total Antioxidant Status (TAS) Control	5 x 5 ml	BXC0554A	Lyo



SECTION 2

AQUEOUS STANDARDS

Aqueous Standards

Aqueous standards in diagnostics are reference solutions used to calibrate and validate diagnostic assays, ensuring accurate measurement of analytes in biological fluids such as blood, urine, and saliva. These standards consist of known concentrations of target molecules dissolved in water, closely mimicking the physiological environment.

The Fortress Aqueous Standards are available in a liquid stable format for convenience and ease-of-use, with a long shelf life, and are traceable to reference standard material.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Aqueous Standards

- Liquid stable (ready-to-use).
- Long shelf life.
- Traceable to reference standard material.

Description	Method	Size	Cat No.	Type
Albumin	45 g/L (4.5g/dL)	10 x 5 ml	BXCSTD01	LS
Calcium	Referenced against NIST 909b (2.5mmol/L 10mg/dL)	10 x 5 ml	BXCSTD02	LS
Chloride	Referenced against NIST 909b (75mmol/L)	10 x 5 ml	BXCSTD03	LS
Chloride	Referenced against NIST 909b (100mmol/L)	10 x 5 ml	BXCSTD04	LS
Cholesterol	Referenced against NIST 909b (5.17mmol/L 200mg/dL)	10 x 5 ml	BXCSTD05	LS
Creatinine	Referenced against NIST 909b (177 µmol/L 2 mg/dL)	10 x 5 ml	BXCSTD06	LS
Creatine/Glucose/ Urea Standard	Referenced against NIST 965a / 909b (5.55 mmol/L 100mg/dL/ 177 µmol/L / 8.33mmol/L)	10 x 5 ml	BXCSTD24	LS
Glucose	Referenced against NIST 965a (5.55 mmol/L 100mg/dL)	10 x 5 ml	BXCSTD07	LS
Glucose-Fructose Standard		5 x 1 ml	BXCSTD26	LS
Haemoglobin Standard	For Drabkin's Method (18g/dL)	5 x 10 ml	BXCSTD08	LS
Haemoglobin Standard Set	For Drabkin's Method (8, 10, 12, 15 & 18g/dL)	5 x 1 x 10 ml	BXCSTD09	LS
Iron	35.8 µmol/L (0.2 mg/dL)	10 x 5 ml	BXCSTD10	LS
Iron	107.4 µmol/L (0.6 mg/dL)	10 x 5 ml	BXCSTD11	LS
Lactate	4.44mmol/L (40mg/dL)	10 x 5 ml	BXCSTD12	LS
Magnesium	Referenced against NIST 909b (1.0 mmol/l2.43mg/dL)	10 x 5 ml	BXCSTD13	LS
Phosphorus	1.61 mmol/L (5 mg/dL)	10 x 5 ml	BXCSTD14	LS
Potassium	Referenced against NIST 909b (0.5 mmol/L)	10 x 5 ml	BXCSTD15	LS
Potassium	Referenced against NIST 909b (5 mmol/L)	10 x 5 ml	BXCSTD16	LS
Pyruvate	2 mmol/L	10 x 5 ml	BXCSTD17	LS
Sodium	Referenced against NIST 909b (150.0 mmol/L 150 mEq/L)	10 x 5 ml	BXCSTD18	LS
Total Protein	Referenced against NIST 927d (60g/L (6.0 g/dL)	10 x 5 ml	BXCSTD19	LS
Triglycerides	Referenced against NIST 909b (2.28 mmol/L 200mg/dL)	10 x 5 ml	BXCSTD20	LS
Urea	Referenced against NIST 909b (8.33 mmol/L 50mg/dL)	10 x 5 ml	BXCSTD21	LS
Uric Acid	Referenced against NIST 909b (595 µmol/L 10mg/dL)	10 x 5 ml	BXCSTD22	LS
Urinary Copper Standard	Referenced against NIST-SE 3114 (1.6mol/L)	10 x 5 ml	BXCSTD25	LS
Urinary/CSF Protein Standard	Referenced against NIST 927d (1g/L)	10 x 5ml	BXCSTD23	LS



SECTION 3

BLOOD GAS & ELECTROLYTES

Blood Gas & Electrolyte Controls

Blood gas and electrolyte controls in diagnostics are essential for ensuring the accuracy and reliability of tests that measure critical parameters like pH, oxygen (PaO_2), carbon dioxide ($PaCO_2$), and key electrolytes such as sodium, potassium, chloride, and bicarbonate. These controls, typically pre-prepared solutions with known concentrations, are used to calibrate and validate diagnostic equipment, such as blood gas analyzers.

The Fortress Blood Gas & Electrolytes Quality Controls contain values for ten parameters, with values assigned by European Reference Laboratories, covering pH, pCO_2, pO_2 and electrolytes. Available in a liquid stable format for convenience and ease-of-use. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Blood Gas & Electrolyte Controls

- Liquid stable controls with a shelf life of 1 year when stored, unopened at 2-8 °C.
- Values are assigned by reference laboratories.
- Store at 2-8 °C. Do not freeze or expose to temperatures greater than 30 °C.
- When opened, analyse immediately for Blood Gas parameters and use within 1 hour for electrolytes.

Analytes

Calcium Chloride Glucose	Lactate Potassium Sodium	pCO2 pH pO2	Total CO2

Description	Size	Cat No.	Type
Blood Gas & Electrolyte Control (Level 1)	1 x 2 ml	BXC0108A	LS
Blood Gas & Electrolyte Control (Level 1)	10 x 2 ml	BXC0108D	LS
Blood Gas & Electrolyte Control (Level 2)	1 x 2 ml	BXC0108B	LS
Blood Gas & Electrolyte Control (Level 2)	10 x 2 ml	BXC0108E	LS
Blood Gas & Electrolyte Control (Level 3)	1 x 2 ml	BXC0108C	LS
Blood Gas & Electrolyte Control (Level 3)	10 x 2 ml	BXC0108F	LS
Blood Gas & Electrolyte Control (Tri-Level)	30 x 2 ml	BXC0108G	LS

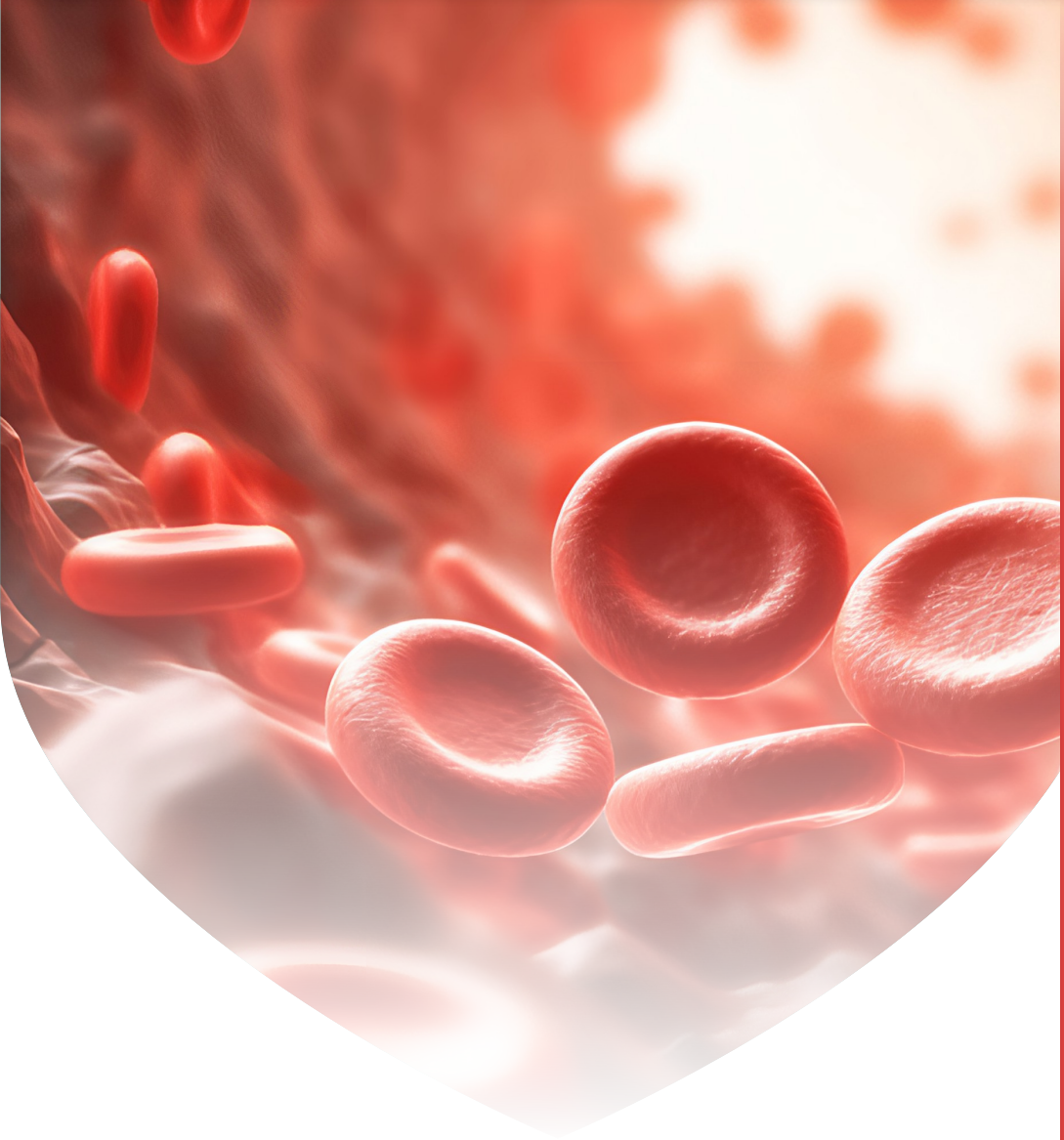
Electrolyte Controls

- Liquid stable format with a shelf life of 2 years when stored at 2-8 °C.
- Values are assigned by reference Laboratories.
- Store at 2-8 °C. Do not freeze or expose to temperatures greater than 30 °C.
- When opened the analytes are stable for a period of 15 days when stored at 2-8 °C.

Analytes

Chloride (ISE & Colorimetry)	Potassium (ISE & Colorimetry)	pH	Sodium (ISE & Colorimetry)

Description	Details	Size	Cat No.	Type
Electrolytes Calibrator		5 x 5 ml	BXC0140A	LS
Electrolytes Control (Level 1)	**Low (Na, K, Cl)**	5 x 5 ml	BXC0143A	LS
Electrolytes Control (Level 2)	**Normal (Na, K, Cl)**	5 x 5 ml	BXC0144A	LS
Electrolytes Control (Level 3)	**High (Na, K, Cl)**	5 x 5 ml	BXC0145A	LS



SECTION 4

BLOOD GROUPING

Blood Grouping Controls

Blood grouping controls in diagnostics are vital for ensuring the accuracy of blood type determination, which is essential for safe blood transfusions, organ transplants, and pregnancy management. These controls are standardised samples with known blood types (A, B, AB, O, and Rh factor) used to verify the performance of blood typing assays and equipment. By including both positive and negative controls in the testing process, laboratories can ensure that reagents are reacting correctly with antigens and antibodies, reducing the risk of errors in identifying a patient's blood group.

The Fortress Seraqual ABO-Rhesus Blood Grouping Quality Control Set is available in a liquid stable format for convenience and ease-of-use and covers all major blood types. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

AB0-Rhesus Blood Grouping Control Set

- Ready-to-Use
- Covers all major blood types.
- Total Blood Kit.

Analytes

A AB	B O	Rhesus Rh	Kell Phenotype

Description	Details	Size	Cat No.	Type
AB0-Rhesus Blood Grouping Control Set	For use with Rh-reagents with ABD	4 x 4 ml	BXC0070A	LS
Monoclonal Anti-D Negative Control		1 x 10 ml	BDNC0010	LS
Precise Weak Anti-D Control	Sensitivity Control for AHG	1 x 5 ml	BGWD0005	LS



SECTION 5

BONE MARKERS

Bone Markers

Bone marker controls play a critical role in ensuring the accuracy and reliability of diagnostic tests that assess bone metabolism. These standardized samples contain known levels of key markers such as osteocalcin, P1NP, CTX, and alkaline phosphatase, and are used to verify the performance of assays and analytical instruments.

The Fortress Bone Marker Control Set is available in a lyophilised format for convenience and ease of use. Each control comes with method- and instrument-specific assigned values, ensuring compatibility across various testing platforms. Regular use of these controls supports consistent, high-quality diagnostics and enhances patient safety by maintaining the integrity of bone health assessments across clinical settings.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

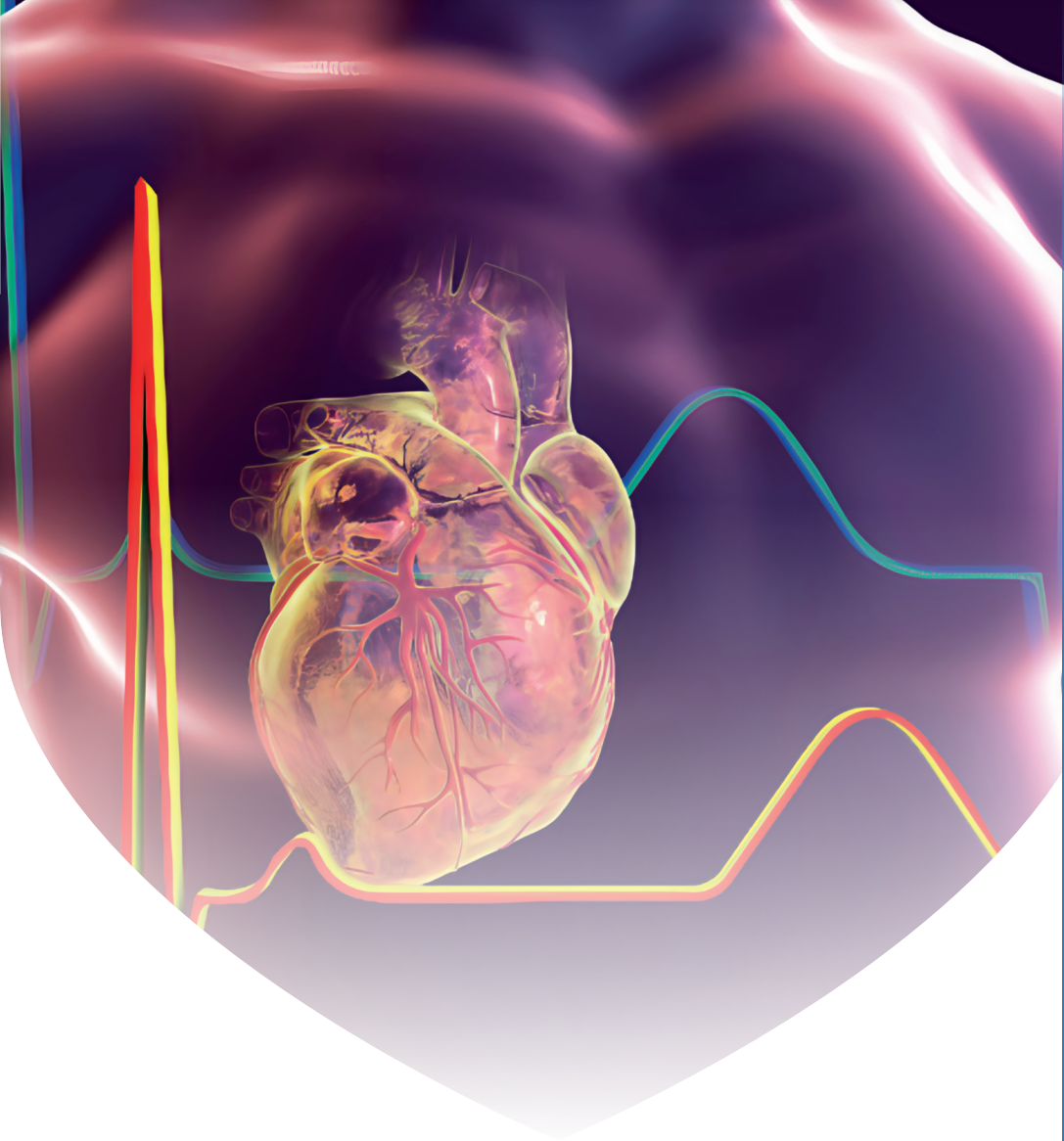
Bone Markers Controls (Serum)

Description	Size	Cat No.	Type
Bone Markers Control Level 1	2 x 1 ml	BXC0707A	Lyo
Bone Markers Control Level 2	2 x 1 ml	BXC0707B	Lyo
Bone Markers Control Level 3	2 x 1 ml	BXC0707C	Lyo
Bone Markers Control Tri-level	3 x 1 x 1ml	BXC0707D	Lyo

Analytes

	Reconstituted Stability	Storage
Osteocalcin	24 hours	2-8°C
Bone ALP	7 Days	2-8°C
Procollagen Type - 1	7 Days	2-8°C

Description	Size	Cat No.	Type
Bone Markers Serum CTX Control Level-1	3 x 1 ml	BXC0705A	Lyo
Bone Markers Serum CTX Control Level-2	3 x 1 ml	BXC0705B	Lyo



SECTION 6

CARDIAC

Cardiac Controls

Cardiac controls are essential in diagnostics for ensuring the accuracy and reliability of tests that measure key cardiac biomarkers, such as troponin and B-type natriuretic peptide (BNP), which are critical for diagnosing heart attacks, heart failure, and other cardiovascular conditions.

The Fortress Seraqual Cardiac Quality Controls have been designed to cover several cardiac analytes. Available in a lyophilised format for enhanced stability and manufactured from 100% human based serum to negate matrix effect. The controls are supplied with instrument and method specific assigned values.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Cardiac Controls



- Values are assigned by reference laboratories.
- Lyophilised format stable up to expiry at 2-8 °C.
- Reconstituted stability of 5 days at 2-8 °C or 4 weeks at -20 °C.
- 100% Human serum base.

Analytes

Homocysteine CK Total	CK MB Activity CK MB Mass	Digoxin Troponin I	Troponin T Myoglobin

Description	Details	Size	Cat No.	Type
Cardiac Control (Level 1)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 2 ml	BXC0455A	Lyo.
Cardiac Control (Level 1)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 1 ml	BXC0455B	Lyo.
Cardiac Control (Level 2)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 2 ml	BXC0456A	Lyo.
Cardiac Control (Level 2)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 1 ml	BXC0456B	Lyo.
Cardiac Control (Level 3)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 2 ml	BXC0464A	Lyo.
Cardiac Control (Level 3)	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	5 x 1 ml	BXC0464B	Lyo.
Cardiac Control Set	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	3 x 1 x 2ml	BXC0450A	Lyo.
Cardiac Control Set	**CK Total, CKMB Activity, CKMB Mass, Tni,TnT, Digoxin, Homocysteine, Myoglobin**	3 x 1 x 1ml	BXC0450B	Lyo.

CK/CK MB Calibrators & Controls



- Lyophilised format stable up to expiry at 2-8 °C.
- Values are assigned by Reference Laboratories.
- 100% Human serum base.
- Reconstituted stability 5 days at 2-8 °C, 8 hours at +25 °C and 4 weeks at -20 °C.

Analytes

CK Total	CK MB Activity

Description	Size	Cat No.	Type
CK/CK MB Calibrator	1 x 2 ml	BXC0454A	Lyo.
CK/CK MB Calibrator	5 x 2 ml	BXC0454B	Lyo.
CK/CK MB Control (Level 1)	1 x 2 ml	BXC0453A	Lyo.
CK/CK MB Control (Level 1)	5 x 2 ml	BXC0453B	Lyo.
CK/CK MB Control (Level 1)	10 x 2 ml	BXC0453C	Lyo.

Description	Size	Cat No.	Type
CK/CK MB Control (Level 2)	1 x 2 ml	BXC0459A	Lyo.
CK/CK MB Control (Level 2)	5 x 2 ml	BXC0459B	Lyo.
CK/CK MB Control (Level 2)	10 x 2 ml	BXC0459C	Lyo.

D-DIMER Calibrators & Controls

- Lyophilised format stable up to expiry at 2-8°C.
- Prepared from human serum.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
D-Dimer Calibrator Set	5 x 1 x 1ml	BXC0788A	Lyo.
D-Dimer Control Set (Level 1 & Level 2)	2 x 1 x 1ml	BXC0789A	Lyo.

Homocysteine Calibrators & Controls

- Fortress Homocysteine controls are intended for monitoring accuracy and precision.
- The Calibrators & controls are provided in a Lyophilised format stable up to expiry at 2-8 °C.
- 100% Human serum based.

Description	Size	Cat No.	Type
Homocysteine Calibrator (2 Levels)	2 x 1 x 1ml	BXC0691B	Lyo.
Homocysteine Control (2 Levels)	2 x 1 x 1ml	BXC0692A	Lyo.

Myoglobin Calibrators & Controls

- Lyophilised to achieve long shelf life.
- Reconstituted stability of 30 days at 2-8°C and 12 months at -20°C.

Description	Size	Cat No.	Type
Myoglobin Calibrator Series	5 x 1 x 0.5ml	BXC0486A	Lyo.
Myoglobin Control	1 x 0.5ml	BXC0487A	Lyo.

NTProBNP Calibrators & Controls

- Lyophilised format stable to expiry at 2-8 °C.
- Prepared from human serum.
- Reconstituted stability of 8 hours at 2-8°C.

Description	Details	Size	Cat No.	Type
NTProBNP Calibrator	**Reconstituted Stability 8 hours at 2-8°C**	1 x 1 ml	BXC0335A	Lyo.
NTProBNP Calibrator Series (6 Levels)	**Reconstituted Stability 8 hours at 2-8°C**	6 x 1 x 1 ml	BXC0336A	Lyo.
BNP Control Level 1	**human Serum Base, Reconstituted Stability 8 hours at 2-8°C**	1 x 0.5ml	BXC0520A	Lyo.
BNP Control Level 2	**human Serum Base, Reconstituted Stability 8 hours at 2-8°C**	1 x 0.5ml	BXC0521A	Lyo.

Troponin-T (High Sensitivity) Controls

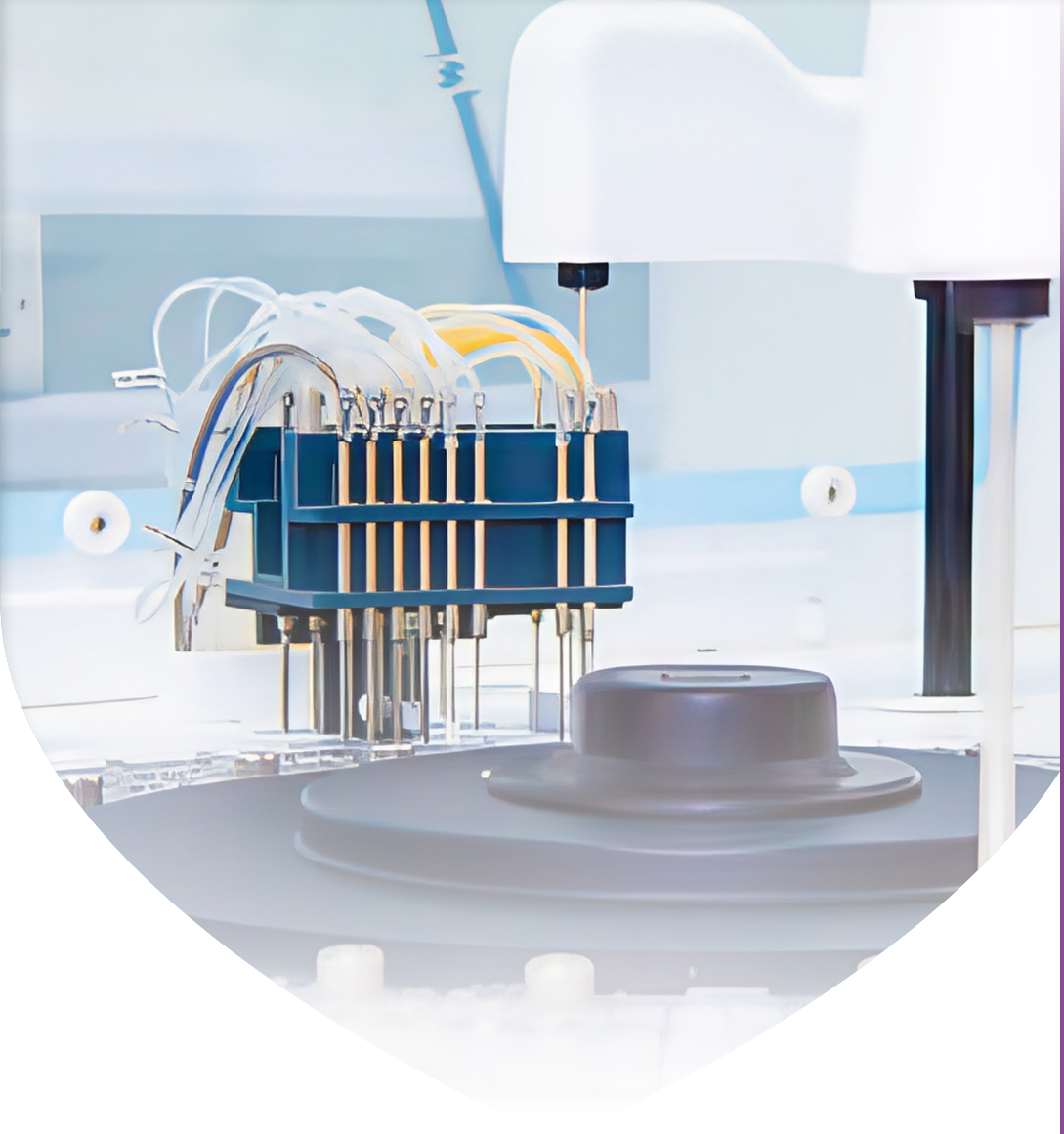
- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Cut-off value of 13.5ng/L for automated systems.
- Suitable for use in point-of-care testing.
- Open vial stability of 1 week, at 2-8°C.

Description	Details	Size	Cat No.	Type
Troponin-T High Sensitivity Control	**For use on all major systems**	3 x 1 ml	BXC0457A	LS

Troponin-I Controls & Calibrators

- Lyophilised for long shelf life, stable to expiry at 2-8 °C.
- Reconstituted stability of 5 days at 2-8°C.

Description	Details	Size	Cat No.	Type
Troponin-I Control Set	**For use on all major systems**	2 x 1 x 1 ml	BXC0470A	Lyo.
Troponin-I Calibrator Set	**For use on all major systems**	6 x 1 x 1 ml	BXC0473A	Lyo.



SECTION 7

CLINICAL CHEMISTRY

Clinical Chemistry Controls

Clinical chemistry controls are vital for ensuring the accuracy, reliability, and validity of laboratory tests that analyze bodily fluid, such as blood and urine. These controls, which include both positive and negative samples with known concentrations of analytes, help validate the performance of diagnostic assays and ensure that testing equipment and reagents are functioning correctly.

The Fortress clinical chemistry range of controls are suitable for a range of clinical chemistry analysers, offering flexibility for your laboratory. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Featured Product

Human Assayed Controls

Multi-Analyte Human Assayed Controls are essential tools in clinical laboratories for ensuring the accuracy and reliability of diagnostic tests. These controls contain a blend of multiple analytes—such as hormones, proteins, and other biomarkers—mimicking human samples.

Why Choose Fortress Human Assayed Controls?

- Human serum based
- Lyophilised format
- 0.2µ filtered
- Method based values
- Custom levels tailored to specific requirements available
- Reconstituted stability

with 65 parameters — **Analytes**

Enzymes
Alkaline Phosphatase
ALT (GPT)
Amylase
AST (GOT)
Cholinesterase
CK (Total)
Gamma GT
GLDH
HBDH
LDH
Lipase
Pancreatic Amylase
Total Acid Phosphatase
Prostatic Acid-Phosphatase
Total Amylase

Substrates
Albumin
APO A1
APO B
Bicarbonate
Bile Acids
Bilirubin Direct
Bilirubin Total
Calcium
Cholesterol
Copper
Creatinine
D3- Hydroxybutyrate
Glucose
HDL Cholesterol
IGA
IGG
IGM
Iron
Iron/TIBC
Inorganic Phosphorous
LDL Cholesterol
NEFA
Osmolality
Total Protein
Transferrin
Triglycerides
UIBC
Urea
Uric Acid
Zinc

Electrolytes
Chloride
Lithium
Magnesium
Potassium
Sodium

Immunoassays
Cortisol
Folate
FT3
FT4
Total T3
Total T4
Total PSA
TSH
Vitamin B12

Drugs
Digoxin
Gentamicin
Paracetamol
Salicylate
Theophylline
Tobramycin

Description	Size	Cat No.	Type
Human Assayed Control (Level 1)	10 x 5ml	BXC0312A	Lyo.
Human Assayed Control (Level 2)	10 x 5ml	BXC0312B	Lyo.
Human Assayed Control (Level 1)	5 x 5ml	BXC0312C	Lyo.
Human Assayed Control (Level 2)	5 x 5ml	BXC0312D	Lyo.

Description	Size	Cat No.	Type
Human Assayed Control (Level 1)	1 x 5ml	BXC0312E	Lyo.
Human Assayed Control (Level 2)	1 x 5ml	BXC0312F	Lyo.

GenChem UltraQC TR

with over 80 parameters

Analytes

Alkaline Phosphatase
Albumin
Alkaline Phosphatase
Alpha-1-Acid Glycoprotein
Alpha-1-Antitrypsin
Alpha-Fetoprotein
ALT (GPT)
Amylase (Pancreatic)
Amylase (Total)
Apo-A1
Apo-B
AST (GOT)
Beta-2-Macroglobulin
Bicarbonate
Bile Acids
Bilirubin, Direct
Bilirubin, Total
C-Reactive Protein
Ceruloplasmin
Calcium
Carcinoembryonic Antigen (CEA)
Chloride
Cholesterol
Cholinesterase
CK-NAC
Complement C3
Complement C4
Copper
Cortisol
Creatinine
D3-Hydroxybutyrate
DHEA-S
Ethanol (alcohol)
Ferritin
Folate
Free T3
Free T4
FSH
Gamma-GT
GLDH
Glucose
α-HBDH
Iron
Haptoglobin
HDL Cholesterol (Direct)
IgA
IgE
IgG
IgM
Lactate
LDH LACTATE DEHYDROGENASE
LDL Cholesterol Direct
Luteinising Hormone (LH)
Lipase
Lipoprotein (a)
Lithium
Magnesium
Myoglobin
Osmolality
Phosphate Inorganic
Potassium
Prealbumin
Progesterone
Prolactin
Protein, Total
PSA Total
Sodium
T Uptake
Testosterone
TSH
TIBC
Total Beta hCG
Total T3
Total T4
Transferrin
Triglycerides
Troponin T
UIBC
Urea
Uric Acid
Vitamin B12
Zinc

Description	Size	Cat No.	Type
Assayed Chemistry Control (Level-1)	6 x 5 ml	BXC0365A	**LS (Frozen).**
Assayed Chemistry Control (Level-2)	6 x 5 ml	BXC0365B	LS (Frozen)
Assayed Chemistry Control (Level-3)	6 x 5 ml	BXC0365C	**LS (Frozen)**

Calibration Serum

- Approximately 40 parameters are value assigned by reference laboratories.
- Method based values with reference traceability provided.
- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8 °C, or 4 weeks at -20 °C.

Analytes

Enzymes
ALP
ALT (GPT)
Total Amylase
AST (GOT)
Cholinesterase
CK NAC
Gamma GT
GLDH
HBDH
LDH
Lipase
Pancreatic Amylase
Prostatic Phosphatase

Substrates
Albumin
Bicarbonate
Bile Acids
Bilirubin Direct
Bilirubin Total
Calcium
Cholesterol
Copper
Creatinine
D3- Hydroxybutyrate
Glucose
HDL Cholesterol
Iron
Iron/TIBC
Inorganic Phosphorous
Lactate
LDL Cholesterol
Total Protein
Triglycerides
Urea
Uric Acid
Zinc

Electrolytes
Chloride
Lithium
Magnesium
Potassium
Osmolality
Sodium

Description	Size	Cat No.	Type
Calibration Serum	1 x 3 ml	BXC0321K	Lyo.
Calibration Serum	5 x 3 ml	BXC0321L	Lyo.
Calibration Serum	10 x 3 ml	BXC0321M	Lyo.

ADA Calibrators & Controls

- Liquid Stable version (Ready-to-use) stable to expiry at 2-8 °C & Open vial stability of 30 days, at 2-8°C.
- Lyophilised version reconstituted stability of 30 days at 2-8°C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
ADA Calibrator	1 x 1 ml	BXC0209A	LS
ADA Control (Level 1)	1 x 1 ml	BXC0210A	LS
ADA Control (Level 2)	1 x 1 ml	BXC0216A	LS
ADA Calibrator	1 x 1 ml	BXC0217A	Lyo.
ADA Control (Level 1)	1 x 1 ml	BXC0218A	Lyo.
ADA Control (Level 2)	1 x 1 ml	BXC0219A	Lyo.

Alcohol, Ammonia, Carbonate Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 24 hours at 2-8°C.

Description	Size	Cat No.	Type
Alcohol, Ammonia, Carbonate Calibrator	1 x 2 ml	BXC0492A	LS
Alcohol, Ammonia, Carbonate Control (Level 1)	1 x 2 ml	BXC0493A	LS
Alcohol, Ammonia, Carbonate Control (Level 2)	1 x 2 ml	BXC0494A	LS

Aldolase Calibrators & Controls

- Lyophilised product with a 3 year shelf life when stored at 2-8 °C.
- Reconstituted stability of 5 days at 2-8°C.
- Values assigned by reference laboratories.

Description	Size	Cat No.	Type
Aldolase Calibrator	3 x 1 ml	BXC0394A	Lyo.
Aldolase Control Elevated	3 x 1 ml	BXC0393A	Lyo.
Aldolase Control Normal	3 x 1 ml	BXC0392A	Lyo.

Alpha-1-Acid Glycoprotein Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Alpha-1-Acid Glycoprotein Calibrator	2 x 1 ml	BXC0892A	LS
Alpha-1-Acid Glycoprotein Control	2 x 1 ml	BXC0891A	LS

Alpha-1-Antitrypsin Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Details	Size	Cat No.	Type
Alpha-1-Antitrypsin Calibrator	Immunoturbidimetric	**1 x 2 ml**	BXC0711A	LS
Alpha-1-Antitrypsin Control (Level 1 & Level 2)	**Immunoturbidimetric**	2 x 1 x 2ml	BXC0712A	LS
Alpha-1-Microglobulin Calibrator		**1 x 1 ml**	BXC0887A	LS
Alpha-1-Microglobulin Control (Level 1 & Level 2)		2 x 1 x 1ml	BXC0889A	LS

Aluminium Calibrators & Controls

- Liquid Stable (Ready-to-Use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Aluminium Control Level 1	1 x 1 ml	BXC0696A	LS
Aluminium Control Level 2	1 x 1 ml	BXC0697A	LS
Aluminium Control Level 3	1 x 1 ml	BXC0698A	LS

Ammonia Controls & Calibrators

- Liquid stable Calibrator and Control with a 2 year shelf life.
- Values are assigned in house using Enzymatic UV method.
- Storage at 2-8 °C.
- One month open vial stability at 2-8 °C.

Description	Size	Cat No.	Type
Ammonia Calibrator	3 x 2 ml	BXC0373A	LS
Ammonia Control High	3 x 2 ml	BXC0375A	LS
Ammonia Control Low	3 x 2 ml	BXC0374A	LS

Angiotensin Converting Enzyme (ACE) Controls & Calibrators

- Lyophilised for long shelf life, stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.

Description	Size	Cat No.	Type
Angiotensin Converting Enzyme (ACE) Calibrator	3 x 1 ml	BXC0177A	Lyo.
Angiotensin Converting Enzyme (ACE) Control (Level 1)	3 x 1 ml	BXC0178A	Lyo.
Angiotensin Converting Enzyme (ACE) Control (Level 2)	3 x 1 ml	BXC0179A	Lyo.

Anti-CCP Controls & Calibrators

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- When vial opened it must be used immediately, store at 2-8°C.

Description	Size	Cat No.	Type
Anti-CCP Calibrator	1 x 1 ml	BXC0379D	LS
Anti-CCP Calibrator Series	6 x 1 x 1ml	BXC0379B	LS
Anti-CCP Control Set	2 x 1 x 1ml	BXC0379C	LS

Anti-Mullerian Hormone (AMH) Control Set

- Lyophilised for enhanced stability
- Stable to expiry printed on the vial at 2–8°C
- Open vial stability after reconstitution: 5 Days

Description	Size	Cat No.	Type
Anti-Mullerian Hormone (AMH) Control Set	2 x 1x0.5ml	BXC0909A	Lyo

APO A1/B Calibrator Series

Description	Size	Cat No.	Type
APO A1/B Calibrator Series	6 x 1 x 1 ml	BXC0413A	LS.

ASO (Single Point) Calibrators

- Values are assigned by in house methods and instruments
- 100% human material designed for matrix conformity.
- The liquid stable ASO Single point calibrator has a shelf life of 2 years when stored at 2-8 °C.
- Once opened the calibrator is stable for a period of 30 days when stored without contamination at 2-8 °C.

Description	Details	Size	Cat No.	Type
ASO (Single Point) Calibrator	**Immunoturbidimetric**	1 x 1 ml	BXC0323A	LS
ASO (Single Point) Calibrator	**Immunoturbidimetric**	3 x 1 ml	BXC0323B	LS

ASO, CRP, RF Control

- This control is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The values are assigned in Reference Laboratories.
- 100% Human serum designed for matrix conformity.
- Once opened the control is stable for a period of 30 days when stored without contamination at 2-8 °C.
- This material is presented in a liquid stable format and is stable up to expiry at 2-8 °C.

Description	Details	Size	Cat No.	Type
ASO, CRP, RF Control	**Immunoturbidimetric**	3 x 1 ml	BXC0645A	LS

Beta-2- Microglobulin Calibrators & Controls

Description	Size	Cat No.	Type
Beta-2- Microglobulin Calibrator	**1 x 1 ml**	BXC0647A	**LS**
Beta-2- Microglobulin Control (Level 1 & Level 2)	1 x 2 x 1 ml	BXC0648A	LS

Bile Acid Controls & Calibrators

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Bile Acid Calibrator	1 x 1 ml	BXC0582A	LS
Bile Acid Control Set (Level 1 & 2)	2 x 1 x 1 ml	BXC0583A	LS

Blood Alcohol Controls & Calibrators

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- When vial opened it must be used immediately, store at 2-8°C.

Description	Size	Cat No.	Type
Blood Alcohol Calibrator	1 x 2 ml	BXC0488A	LS
Blood Alcohol Control (Level 1)	1 x 2 ml	BXC0489A	LS
Blood Alcohol Control (Level 2)	1 x 2 ml	BXC0490A	LS

Bilirubin Controls & Calibrators

- Human Serum based Controls simulating the human serum matrix.
- Values assigned by reference laboratories.
- Typical levels: Total Bilirubin around 350 umol/l (around 20 mg/dl) & Direct Bilirubin around 100 umol/l (around 6.0 mg/dl).
- Lyophilised product and Liquid Stable version ready-to-use stable up to expiry at 2-8 °C.
- Storage at 2-8 °C.
- Reconstituted stability of 5 days at 2-8 °C.
- Values for Total and Direct Bilirubin.
- Ideal for laboratories measuring Neonatal Bilirubin.
- Open vial stability for liquid 3 months.

Description	Size	Cat No.	Type
Bilirubin Calibrator	3 x 1ml	BXC0319A	Lyo.
Bilirubin Control (Elevated)	1 x 1ml	BXC0318A	Lyo.
Bilirubin Control (Elevated)	5 x 1ml	BXC0318B	Lyo.
Bilirubin Calibrator	2 x 1ml	BXC0303A	LS
Bilirubin Control Set	2 x 1 x 1ml	BXC0304A	LS
Bilirubin Control Set, Paediatric	2 x 1 x 1ml	BXC0305A	LS
Bilirubin Control (Normal)	1 x 1ml	BXC0306A	LS

Description	Size	Cat No.	Type
Bilirubin Control (Normal)	3 x 1ml	BXC0306B	LS
Bilirubin Control (Elevated)	1 x 1 ml	BXC0307A	LS
Bilirubin Control (Elevated)	3 x 1 ml	BXC0307B	LS

Citrate (Urinary) Calibrators & Controls

- The controls are presented in a Liquid format and are stable up to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Citrate (Urinary) Calibrator [200mg/L]	2 x 1 ml	BXC0136A	LS
Citrate (Urinary) Control (Level 1) [50mg/L]	2 x 1 ml	BXC0137A	LS
Citrate (Urinary) Control (Level 2) [1000mg/L]	2 x 1 ml	BXC0139A	LS

CO_2 (Bicarbonate) Controls & Calibrators

- Values are assigned by in house methods using Enzymatic CO2 kits.
- The CO2 (Bicarbonate) calibrator is intended for calibrating the Fortress CO2 (Bicarbonate) kit.
- CO2 (Bicarbonate) Calibrator & Controls are Liquid Stable.
- Stable to expiry at 2-8 °C.
- Five hours open vial stability at 2-8 °C.

Description	Size	Cat No.	Type
CO2 (Bicarbonate) Calibrator	3 x 2 ml	BXC0155A	LS
CO2 (Bicarbonate) Control Low	3 x 2 ml	BXC0156A	LS
CO2 (Bicarbonate) Control High	3 x 2 ml	BXC0157A	LS

CSF Controls

- Human CSF based controls.
- Method based values with reference traceability provided.
- Liquid stable (Ready-to-Use) - Stable to expiry at 2-8 °C.
- Once opened, the control is stable for a period of 30 days when stored at 2-8 °C without contamination.

Analytes

Proteins	Electrolytes	Substrates
IgA	Chloride	Microalbumin
IgG	Lactate	Glucose
IgM	Sodium	
Total Protein		

Description	Details	Size	Cat No.	Type
CSF Control (Level 1)	**Microalbumin, Chloride, Glucose, IgA, IgG,IgM, Lactate, Sodium, Total Protein**	1 x 1 ml	BXC0673A	LS
CSF Control (Level 2)	**Microalbumin, Chloride, Glucose, IgA, IgG,IgM, Lactate, Sodium, Total Protein**	1 x 1 ml	BXC0673B	LS

CRP Controls & Calibrators

- Fortress CRP controls are intended for monitoring accuracy and precision of CRP turbidimetric, Immunoturbidimetric and Nephelometric assays.
- This control is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The values are assigned in European Reference Laboratories.
- 100% Human serum designed for matrix conformity.
- Once opened the control is stable for a period of 30 days when stored without contamination at 2-8 °C.

Description	Details	Size	Cat No.	Type
CRP (Multi Point) Calibrator (L1-L6)	**Turbilatex CRP assay**	6 x 1 x 1ml	BXC0385A	LS
CRP (Single Point) Calibrator	**Turbilatex CRP assay**	1 x 1ml	BXC0385B	LS
CRP (Single Point) Calibrator (L6)	**Immunoturbidimetric**	3 x 1 ml	BXC0386B	LS
CRP (Multi Point) Calibrator (L1-L6)	**0.0 - 280 mg/L**	6 x 1 x 1ml	BXC0386A	LS
CRP (Ultra Sensitive) Control Set		2 x 1 x 1 ml	BXC0325A	LS
CRP (Ultra Sensitive) Calibrator Set (L1-L6)		6 x 1 x 0.5 ml	BXC0327A	LS
CRP Control (Level 1)		5 x 1 ml	BXC0326A	LS
CRP Control (Level 2)		5 x 1 ml	BXC0326B	LS
CRP Control Set		2 x 1 x 1 ml	BXC0326C	LS

Cyanmethaemoglobin Standard Set

- Typical concentrations 8,10,12,15,18 g/dL.
- The standard set comprises of 5 standards.
- Values are assigned using in house methods.
- Store the standard set at 2-8 °C. The Standard set is stable up to expiry when stored unopened at 2-8 °C.
- Once opened the standard set is stable for a period of 1 month when stored at 2-8°C without contamination.
- Do not freeze

Description	Size	Cat No.	Type
Cyanmethaemoglobin Standard Set	5 x 1 x 10 ml	BXC0483A	LS

Cystatin C Controls & Calibrators

- Values are assigned using in house methods.
- These controls and calibrators are supplied in lyophilised format with a shelf life of 2 years when stored at 2-8 °C.
- After reconstitution, the controls and calibrators are stable for a period of 1 month.
- Mix gently before use.
- The calibrator set and controls are lyophilised.
- Human serum based to ensure matrix compatibility.
- Do not freeze.

Description	Size	Cat No.	Type
Cystatin C Calibrator Set (6 Levels)	6 x 1 ml	BXC0334A	Lyo.
Cystatin C Control (Level 1)	2 x 1 ml	BXC0333A	Lyo.
Cystatin C Control (Level 2)	2 x 1 ml	BXC0333B	Lyo.

D3-Hydroxybutyrate Controls & Calibrators

- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted Stability of 7 Days at 2-8°C.

Description	Size	Cat No.	Type
D3-Hydroxybutyrate Calibrator	1 x 3 ml	BXC0544A	Lyo
D3-Hydroxybutyrate Control (Level 1)	1 x 5 ml	BXC0543A	Lyo
D3-Hydroxybutyrate Control (Level 2)	1 x 5 ml	BXC0543B	Lyo

D-Dimer Calibrators & Controls

- Lyophilised (Ready-to-use)
- Prepared from human serum.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
D-Dimer Calibrator Set (5 Levels)	1 x 1 ml	BXC0788A	Lyo
D-Dimer Control Set (Level 1 & Level 2)	2 x 1 x 1 ml	BXC0789A	Lyo

ESR Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Details	Size	Cat No.	Type
ESR Control (Level 1)	**To be used with all routine ESR instruments**	2 x 10 ml	BXC0631A	LS
ESR Control (Level 2)	**To be used with all routine ESR instruments**	2 x 10 ml	BXC0632A	LS

Ferritin Controls & Calibrators

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Ferritin Calibrator	1 x 1 ml	BXC0445A	LS
Ferritin Calibrator Set	6 x 1 x 1 ml	BXC0445B	LS
Ferritin Control (Level 1)	3 x 1 ml	BXC0443A	LS
Ferritin Control (Level 2)	3 x 1 ml	BXC0444A	LS

Fructosamine Controls & Calibrators

- Values are assigned using both in house and reference laboratory values.
- 100% Human Serum designed for matrix conformity.

Description		Size	Cat No.	Type
Fructosamine Calibrator		1 x 1 ml	BXC0592A	LS
Fructosamine Control (Level 1)	*Low*	3 x 1 ml	BXC0593A	LS
Fructosamine Control (Level 2)	*High*	3 x 1 ml	BXC0594A	LS

G-6-PDH Controls

- Values assigned by reference Laboratories.
- Stable to expiry at 2-8 °C.
- Reconstituted stability of 5 days at 2-8 °C.
- Lyophilised for enhanced stability.
- Typical Levels: G-6-PDH Deficient Control : 100 - 200 U/l ; G-6-PDH Normal Control : 900 - 1400 U/l

Description	Size	Cat No.	Type
G-6-PDH Control Normal	3 x 1.0ml	BXC0573B	Lyo.
G-6-PDH Control Deficient	3 x 1.0ml	BXC0572B	Lyo.

Glucose-Fructose Control

Description	Size	Cat No.	Type
Glucose-Fructose Control (Level 1)	1 x 1 ml	BXC0099A	LS
Glucose-Fructose Control (Level 2)	1 x 1 ml	BXC0099B	LS

Glutathione Peroxidase Calibrator & Control

Presented in a Lyophilised format.

Description	Size	Cat No.	Type
Glutathione Peroxidase Control	5 x 1 ml	BXC0556A	Lyo
Glutathione Peroxidase Control	5 x 0.5 ml	BXC0556B	Lyo
Glutathione Peroxidase Calibrator	5 x 1 ml	BXC0557A	Lyo

Glycerol Control

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Glycerol Control	2 x 5 ml	BXC0278A	LS

HDL/LDL Calibrators

- Fortress HDL/LDL Cholesterol Calibrator is presented in a Lyophilised format for enhanced stability. Stable up to expiry at 2-8 °C.
- Once opened and reconstituted the control is stable for 7 days at 2-8 °C, or 30 days at -20 °C.
- 100% human material designed for matrix conformity.

Analytes

HDL Cholesterol (Direct)	LDL Cholesterol (Direct)

Description	Size	Cat No.	Type
HDL/LDL Calibrator	3 x 1 ml	BXC0315D	Lyo
HDL/LDL Calibrator	1 x 1 ml	BXC0315E	Lyo

IgG Sub Classes Controls/Calibrators

Description	Size	Cat No.	Type
IgG Sub Classes Control Set	2 x 1 x 0.5 ml	BXC0726A	LS.
IgG Sub Classes Calibrator (IgG 1, 2, 3)	1x 1 ml	BXC0727A	LS.
IgG Sub Classes Calibrator (IgG 4)	1 x 1 ml	BXC0728A	LS.

IgE Calibrators & Controls

- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.
- Reconstituted stability of 30 days at -20°C.

Description	Size	Cat No.	Type
IgE Calibrator	1 x 1 ml	BXC0752A	Lyo.
IgE Control Set (Level 1 & Level 2)	2 x 2 x 1 ml	BXC0753A	Lyo.

Immunoglobulin Calibrator

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.
- Prepared from Human Serum.

Analytes

IgA	IgG	IgM

Description	Size	Cat No.	Type
Immunoglobulin Calibrator	3 x 1 ml	BXC0040A	LS

Lipase Calibrator

- Lyophilised stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C, after reconstitution.

Description	Size	Cat No.	Type
Lipase Calibrator	3 x 1 ml	BXC0510A	Lyo

Lipoprotein (a) Calibrators & Controls

- The controls are supplied in two levels.
- 100% Human serum designed for matrix conformity.
- Lyophilised controls and calibrators stable up to expiry at 2-8 °C.
- Once opened the calibrator and controls are stable for a period of 30 days when stored at 2-8 °C.
- Lipoprotein Low and High controls typically have the following the levels:
  Lipoprotein Control Low around 20mg/dl.
  Lipoprotein Control High around 50mg/dl.
- Do not freeze.

Description	Size	Cat No.	Type
Lipoprotein (a) Calibrator High	1 x 1 ml	BXC0134A	Lyo
Lipoprotein (a) Control Low	1 x 1 ml	BXC0131A	Lyo
Lipoprotein (a) Control High	1 x 1 ml	BXC0133A	Lyo

Lithium Calibrator

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Details	Size	Cat No.	Type
Lithium 3000 Calibrator	**3000 mmol/L**	2 x 1 ml	BXC0106A	LS
Lithium Calibrator	Only for Enzymatic Lithium	1 x 2 x 1 ml	BXC0141A	LS

Methanol Calibrators & Controls

Description	Size	Cat No.	Type
Methanol Calibrator	1 x 2ml	BXC0497A	LS
Methanol Control (Level 1)	1 x 2ml	BXC0498A	LS
Methanol Control (Level 2)	1 x 2ml	BXC0499A	LS

Microalbumin Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Microalbumin Calibrator Series	5 x 1 x 1 ml	BXC0329A	LS
Microalbumin Control Set (L1-L2)	2 x 1 x 1 ml	BXC0328A	LS

Myoglobin Calibrators & Controls

- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted stability of 30 days at 2-8°C.

Description	Size	Cat No.	Type
Myoglobin Calibrator Series	1 x 1 x 0.5ml	BXC0486A	Lyo.
Myoglobin Control	1 x 0.5ml	BXC0487A	Lyo.

Oxalate Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Oxalate (Urinary) Calibrator [0.5 mmol/L]	1 x 5ml	BXC0147A	LS
Oxalate (Urinary) Control (Level 1) [0.2 mmol/L]	1 x 5ml	BXC0148A	LS
Oxalate (Urinary) Control (Level 2) [0.7 mmol/L]	1 x 5ml	BXC0149A	LS

RF (Multi-Point) Calibrators

- This Calibrator is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The Calibrator is presented as a single level calibrator which can be diluted as necessary for calibrating RF Turbidimetric Assays.
- Values are assigned by in house methods and instruments.
- 100% human material designed for matrix conformity.
- Once opened the control is stable for a period of 30 days. when stored without contamination at 2-8 °C.

Description	Details	Size	Cat No.	Type
RF (Multi-Point) Calibrator	**Immunoturbidimetric**	1 x 2ml	BXC0612A	LS
RF (vMulti-Point) Calibrator	**Immunoturbidimetric**	3 x 2ml	BXC0612B	LS

TIBC Calibrator

- Lyophilised Stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
TIBC Calibrator (Single Level)	2 x 1 ml	BXC0238A	Lyo.

Vitamin D Control & Calibrator

Description	Size	Cat No.	Type
Vitamin D Control Set	2 x 1 x 1 ml	BXC0474A	LS
Vitamin D Calibrator Set	5 x 1 x 1ml	BXC0475A	LS

Zinc & Copper Calibrator & Control

- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted stability of 30 days at 2-8°C.

Description	Size	Cat No.	Type
Zinc & Copper Calibrator	2 x 1 ml	BXC0463A	Lyo
Zinc & Copper Control Level-1	1 x 1 ml	BXC0465A	Lyo





SECTION 8

COAGULATION/ HAEMOSTASIS

Coagulation / Haemostasis Controls

Coagulation and haemostasis controls are essential in diagnostics for accurately assessing a patient's ability to form blood clots and maintain haemostasis. These controls include standardized samples with known coagulation properties used to validate laboratory tests that measure parameters like prothrombin time (PT), activated partial thromboplastin time (aPTT), and platelet counts.

The Fortress Haemostasis Plasma Controls are provided in a lyophilised format for enhanced stability and are 100% human serum based to negate matrix effects. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Plasma Calibrator & Controls

For Coagulation Series only, PT, aPTT, Fibrinogen, Thrombin Time

- The calibrator and controls are supplied in lyophilised format and stable to expiry when stored at 2-8 °C.
- Once opened and reconstituted, the calibrators and controls are stable for a period of 24 hours at 2-8 °C.
- 100% Human plasma to mimic human samples.
- Do not Freeze

Description	Size	Cat No.	Details
D-Dimer Calibrator Set (L1-L5)	5 x 0.5 ml	COAG136A	
D-Dimer Control Low	5 x 0.5 ml	COAG134A	
D-Dimer Control High	5 x 0.5 ml	COAG135B	
FDP Control Low	5 x 0.5 ml	COAG140A	
FDP Control High	5 x 0.5 ml	COAG141A	
Lupus Anticoagulant (LA) Control Negative	5 x 1 ml	COAG145A	
Lupus Anticoagulant (LA) Control Positive	5 x 1 ml	COAG146A	
Protein C Control Low	5 x 1 ml	COAG150A	
Protein C Control Normal	5 x 1 ml	COAG151A	
Protein S Control Low	5 x 1 ml	COAG155A	
Protein S Control Normal	5 x 1 ml	COAG156A	
Factor Assays Control Normal	5 x 1 ml	COAG160A	Factor II, V, VII, VIII, IX, X, XI, XII
Factor Assays Control Abnormal	5 x 1 ml	COAG161A	Factor II, V, VII, VIII, IX, X, XI, XII
Factor Assays Calibrator Plasma	5 x 1 ml	COAG162A	Factor II, V, VII, VIII, IX, X, XI, XII
Plasma Calibrator	5 x 1 ml	COAG125A	PT, aPTT, Fibrinogen, Thrombin Time
Plasma Control (Level 1 & Level 2)	2 x 5 x 1 ml	COAG112A	PT, aPTT, Fibrinogen, Thrombin Time
Plasma Control (Level 1)	1 x 1 ml	COAG108A	PT, aPTT, Fibrinogen, Thrombin Time
Plasma Control (Level 1)	5 x 1 ml	COAG108B	PT, aPTT, Fibrinogen, Thrombin Time
Plasma Control (Level 2)	1 x 1 ml	COAG109A	PT, aPTT, Fibrinogen, Thrombin Time
Plasma Control (Level 2)	5 x 1 ml	COAG109B	PT, aPTT, Fibrinogen, Thrombin Time
Heparin Calibrator Set (L1-L5)	1 x 5 x 1 ml	COAG142A	
Low Molecular Weight Heparin Control Low	5 x 1 ml	COAG140A	
Low Molecular Weight Heparin Control High	5 x 1 ml	COAG140B	
Unfractionated Heparin Control Low	5 x 1 ml	COAG141A	
Unfractionated Heparin Control High	5 x 1 ml	COAG141B	



SECTION 9

CUSTOMISED QUALITY CONTROLS

Customised Quality Controls

Fortress Diagnostics has extensive experience and expertise in the production of customised quality controls for EQA programmes, and manufacturing custom made QC solutions for laboratories throughout the global market.

Over 200 analytes can be customized in the required matrix, with concentrations, levels and volumes. The following list of quality controls can be customised by Fortress Diagnostics:

- Antioxidant Controls
- Clinical Chemistry
- Cardiac Controls
- Haemostasis Controls
- Diabetes Controls
- Immunoassay Controls
- Immunology / Specific Protein Controls
- Lipids
- Tumor Markers
- TDM and DOA
- Urine Assayed
- Urine Strip Controls

Why Customise Fortress Controls?

- Cost Effective
- Customised
- Quality
- Choice of Matrix
- Fast Lead Time

Our Process - Time Frame of 90 Days

1. Customer Provides a Specification
2. Specification Reviewed & Agreed
3. Customer Places Order
4. Pilot Samples Sent to Customer
5. Customer Returns Pilot Results (2 Weeks)
6. Manufacture of Controls
7. Despatch of Samples to Customer for Approval/Testing
8. Customer Accepts Material
9. Material is Labelled, Packaged & Despatched to Customer





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SECTION 10

DIABETES

Diabetes

Diabetes controls are crucial in diagnostics for ensuring the accuracy and reliability of tests that measure blood glucose levels and other related biomarkers, enabling timely diagnosis, effective monitoring of glycaemic control, and informed treatment decisions to manage diabetes and prevent complications.

The Fortress Diabetes Controls are lyophilised for enhanced stability, and are ideal for both clinical and research use. The controls are supplied with instrument and method specific assigned values.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Fructosamine Controls & Calibrators

- Values are assigned using both in house and reference laboratory values.
- 100% Human Serum designed for matrix conformity.
- Lyophilised Controls and Calibrators stable to expiry at 2-8 °C.
- Reconstituted stability of 28 days at -20 °C.

Description		Size	Cat No.	Type
Fructosamine Calibrator		1 x 1 ml	BXC0592A	Lyo
Fructosamine Control (Level 1)	*low*	3 x 1 ml	BXC0593A	Lyo
Fructosamine Control (Level 2)	*high*	3 x 1 ml	BXC0594A	Lyo

HbA1c Calibrators

- 100% human blood designed for matrix conformity.
- The Calibrator is supplied in a Lyophilised format with a 2 year shelf life when stored at 2-8 °C.
- Reconstituted stability of 5 days at 2-8 °C.
- HbA1c Calibrator Set: Typical levels: HbA1c Calibrator Level 1: 5-6%; HbA1c Calibrator Level 2: 11-13%
- Do not freeze.

Description	Size	Cat No.	Type
HbA1c Calibrator Set	2 x 1 x 0.5 ml	BXC0668A	Lyo.
HbA1c Calibrator Series	5 x 1 x 0.5 ml	BXC0678A	Lyo.

HbA1c Controls

- Controls are supplied in a Lyophilised format stable to expiry at 2-8 °C.
- The controls are value assigned in Reference Laboratories.
- The Control carries values for methods such as Immunoturbidimetry, Micro-column, HPLC and Enzymatic HbA1c & point of care devices.
- Values are provided for both NGSP DCCT and IFCC methodologies.

Description	Size	Cat No.	Type
HbA1c Control Set (HPLC ONLY)	2 x 1 x 1 ml	BXC0779A	Lyo.
HbA1c Control Set	2 x 1 x 0.5 ml	BXC0675A	Lyo.
HbA1c Control Set	2 x 2 x 0.5 ml	BXC0675B	Lyo.
HbA1c Control Low	2 x 0.5 ml	BXC0676A	Lyo.
HbA1c Control High	2 x 0.5 ml	BXC0677A	Lyo.
HbA1c Control L-1 (Bulk only)	1 x 0.5 ml	BXC0669X	Lyo.
HbA1c Control L-2 (Bulk only)	1 x 0.5 ml	BXC0669Y	Lyo.



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SECTION 11

DRUGS OF ABUSE

Drugs of Abuse

Drugs of abuse controls are vital in diagnostics for accurately detecting and monitoring the use of illicit substances, prescription medications, and other psychoactive drugs in patients. These controls consist of standardized samples with known concentrations of specific drugs or their metabolites, used to validate the performance of drug testing assays, such as immunoassays and gas chromatography.

The Fortress Drugs of Abuse Controls, are available in a liquid stable (ready-to-use) format for convenience and ease-of-use, offer an independent assessment of performance for Drugs of Abuse Immunoassays, and are suitable for semi-quantitative and quantitative use. The controls are supplied with instrument and method specific assigned values.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Drugs of Abuse Controls



- Fortress Drugs of Abuse controls are intended for checking assay performance of Drugs of Abuse Immunoassays.
- These controls are urine based and have concentrations 25% above and below the SAMHSA (Substance Abuse And Mental Health Services Administration) recommended cut off levels.
- Liquid stable controls (ready-to-use). ¦ Suitable for semi-quantitative and quantitative use.
- 2 years shelf life. ¦ 30 days open vial stability when stored at 2-8 °C.

Typical Values in Drugs of Abuse Control Levels

Analyte	DOA Level (ng/ml)	DOA Level 2 (ng/ml)	DOA Level 3 (ng/ml)
Amphetamines	600	900	1350
Barbiturates	100	400	1000
Benzodiazepines	102	250	600
Cannabinoids	50	90	150
Cocaine	300	275	400
LSD	0.05	0.1	0.2
Methadone	200	300	800
Opiates	1000	1500	6000
Phencyclidine	15	25	100
Propoxyphene	60	100	-
TCA	50	90	180

Analytes

Amphetamines
Barbiturates
Benzodiazepines
Cocaine
LSD
Methadone
Opiates
Phencyclidine
Propoxyphene

Description	Size	Cat No.	Type
Drugs of Abuse Control (Level 1)	10 x 10 ml	BXC0784A	LS
Drugs of Abuse Control (Level 1)	10 x 3 ml	BXC0784B	LS
Drugs of Abuse Control (Level 2)	10 x 10 ml	BXC0785A	LS
Drugs of Abuse Control (Level 2)	10 x 3 ml	BXC0785B	LS
Drugs of Abuse Control (Level 3)	10 x 10 ml	BXC0786A	LS
Drugs of Abuse Control (Level 3)	10 x 3 ml	BXC0786B	LS
Multi DOA Calibrator/Control	6 x 1 x 1 ml	BXC0989A	LS
Tricyclic Anti-depressant Calibrator/Control	3 x 3 x 3 ml	BXC0996C	Lyo.



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SECTION 12

HAEMATOLOGY

Haematology

Hematology controls are crucial in diagnostics for ensuring the accuracy and reliability of tests that analyse blood components, including red and white blood cells, platelets, and hemoglobin levels. These controls consist of standardised samples with known cell counts and characteristics, used to validate laboratory instruments and procedures for tests like complete blood counts (CBC) and coagulation profiles.

The Fortress Haematology Controls combines 14 analytes, covering the most commonly tested blood profiles in a single control. With 3-part differential technology an unbiased, independent assessment of analytical performance. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Haematology Controls & Calibrators

with 6 months Shelf life & 1 month open vial stability

- Fortress Haematology calibrators are intended for calibrating 3 part differential analysers.
- The controls are intended for monitoring accuracy and precision in 3 part differential analysers.
- The product is supplied as a liquid stable material with storage at 2-8 °C.
- When opened, this product is stable for a period of 21 days, when stored at 2-8 °C.

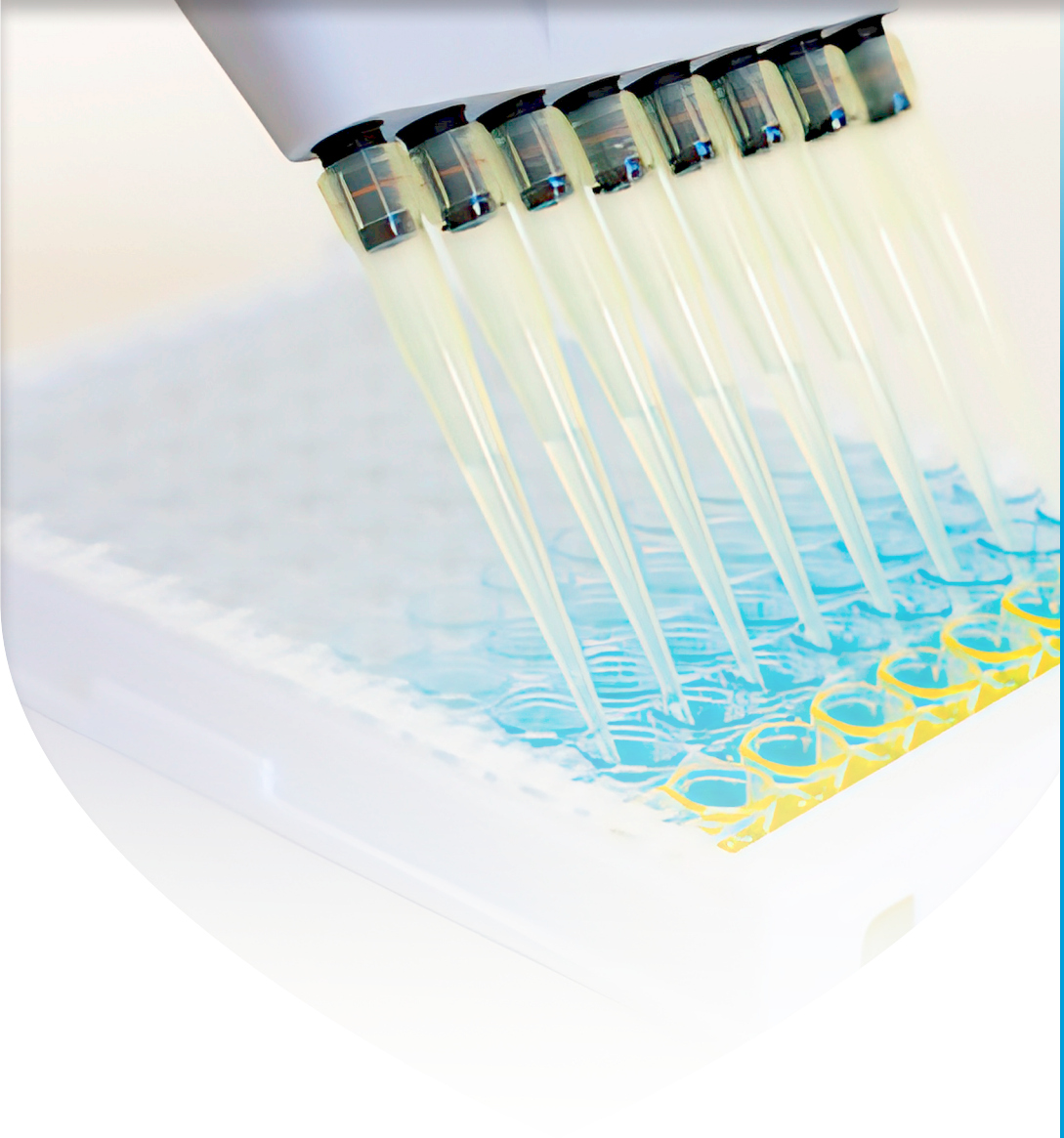
Values Available for the Following Analysers:

Abbott Cell Dyn 1600/1700/1800, ABX Micros 60, 80/80XL, Coulter AcT 5 Diff, Coulter ACT Diff/ACT Diff 3, Coulter MD Series, Coulter STKS/MAXM/HMX, Coulter T890/T660/T540, Danam DATACELL 16CP/I1800/18/18MS/18MS Plus, Siemens ADVIA 120/2120/1210i, Sysmex XE2100/XE5000/XT1800i/XT2000i/XS1000i, Sysmex KX21/K1000, ERMA PCE210, Merck Medonic CA620, Mindray BC1800/BC3000/BC-3000CT/BC3200/BC3000 Plus/BC2600/BC2800, Nihon Kohden CELLTAC Alpha MEK 6318, MEK 6410K, Fortress CellDiff 3, Swelab AC920, Medonic CA610, Abacus Junior.

Analytes

Haemoglobin	MCV	RDW SD	
HCT	MPV	Total RBC	Lymphocytes
MCH	Platelets	Total WBC	Mid Cells
MCHC	RDW CV	Granulocytes	

Description	Size	Cat No.	Type
Haematology Calibrator	3 x 3 ml	HAEMC005	LS
Haematology Control (Level 1)	3 x 3 ml	HAEMC001	LS
Haematology Control (Level 2)	3 x 3 ml	HAEMC002	LS
Haematology Control (Level 3)	3 x 3 ml	HAEMC003	LS
Haematology Control (3 Levels)	3 x 3 x 3 ml	HAEMC004	LS



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SECTION 13

IMMUNOASSAY/ INFECTIOUS DISEASES

Immunoassay

Immunoassay controls are essential in diagnostics for ensuring the accuracy and reliability of tests that detect and quantify specific proteins, hormones, drugs, and antibodies in biological samples. These controls consist of standardised samples with known concentrations of analytes, which are used to validate the performance of immunoassay methods such as enzyme-linked immunosorbent assays (ELISA) and radioimmunoassays. By incorporating these controls, laboratories can monitor assay precision, sensitivity, and specificity, thus minimising the risk of false-positive or false-negative results that could lead to incorrect diagnoses or inappropriate treatment decisions.

The Fortress Immunoassay Controls Range have been designed to cover a variety of the most comprehensive markers, including: thyroid hormones, fertility hormones, tumour markers, growth deficiency, allergy, diabetes, anaemia and steroids. All Fortress controls in the Immunoassay range are manufactured from 100% human serum to negate matrix effects. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Immunoassay Controls

- Fortress Immunoassay Controls are intended for monitoring accuracy and precision.
- Controls are provided in a Lyophilised format stable up to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8 °C or 4 weeks at -20 °C.
- Values are assigned in reference laboratories.
- 28 analytes.

Analytes

Thyroid Total T3 Total T4 Free T3 Free T4 TSH T-uptake	**Fertility Hormones** LH FSH Prolactin HCG **Tumour Markers** CEA AFP PSA fPSA	**Cardiac Markers** Digoxin **Growth Deficiency** Human Growth Hormone	**Allergy** IgE **Diabetes** C-peptide Insulin **Anaemia** Ferritin	**Steroids** 17-OH Progesterone Cortisol Unconjugated Estriol (Free-Estriol) Progesterone Testosterone DHEA-S Estradiol Free-Testosterone

Description	Size	Cat No.	Type
Immunoassay Control (Level 1)	4 x 3 ml	BXC0363A	Lyo.
Immunoassay Control (Level 2)	4 x 3 ml	BXC0363B	Lyo.
Immunoassay Control (Level 3)	4 x 3 ml	BXC0363C	Lyo.
Immunoassay Tri-Level Control	3 x 4 x 3 ml	BXC0363D	Lyo.

Immunoassay Speciality

- Lyophilised stable to expiry at 2-8 °C.
- 100% Human serum
- Reconstituted stability of 7 days at 2-8 °C or 28 days stored at -20 °C.

Analytes

1-25 (OH) Vitamin D Anti TG Anti TPO	C Peptide IGF-I Insulin	Osteocalcin PTH Calcitonin

Description	Size	Cat No.	Type
Immunoassay Speciality (Level 1)	1 x 2 ml	BXC0364A	Lyo.
Immunoassay Speciality (Level 2)	1 x 2 ml	BXC0364B	Lyo.
Immunoassay Speciality (Level 3)	1 x 2 ml	BXC0364C	Lyo.
Immunoassay Speciality Tri-Level Control	3 x 1 x 2 ml	BXC0364D	Lyo.

Anti-Mullerian Hormone (AMH) Calibrators & Controls

- Lyophilised for long shelf life, stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.
- Compatible with all AMH assays.

Description	Size	Cat No.	Type
Anti-Mullerian Hormone (AMH) Calibrators & Controls	Cal A: 1 x 0.5ml; Cal B-G: 6 x 0.5ml; Ctl L1: 1 x 0.5ml; Ctl L2: 1 x 0.5ml	BXC0999A	Lyo.

hCG Serum Control

- Fortress hCG Serum controls are intended for monitoring the accuracy and precision of hCG assays in both quantitative and qualitative formats.
- Controls are supplied as liquid stable materials stable up to expiry at 2-8 °C.
- The controls are available in two levels – positive and negative.
- Value assignment of the Positive Controls is performed in reference laboratories.
- 100% Human serum based for matrix conformity.
- Positive control has a hCG concentration of >/= 20 lU/ml, making it ideal for sensitivity testing of qualitative assays.

Description		Size	Cat No.	Type
hCG Serum Control	*Positive*	1 x 1 ml	BXC0681A	LS.
hCG Serum Control	*Negative*	1 x 1 ml	BXC0682A	LS.
hCG Serum Control	*Positive*	1 x 5 ml	BXC0683A	LS.

H-Pylori Control

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
H-Pylori Control (2 Levels)	2 x 1 x 1 ml	BXC0684A	LS

Tumour Marker Controls

For use on all major systems & methods including Immunoassay Instruments

- Fortress Tumour Marker controls are multi analyte controls designed for monitoring accuracy.
- The controls are supplied in a Lyophilised format for enhanced stability.
- 100% human serum.
- Reconstituted stability of 10 days at 2-8 °C and 30 days at 20 °C.
- Stable up to expiry at 2-8 °C.

Analytes

AFP	CA 72-4	Cyfra 21	PSA
Beta-2-microglobulin	CA 125	Ferritin	fPSA
CA 15-3	Calcitonin	HCG	Thyroglobulin
CA 19-9	CEA	Neuron Specific Enolase	

Description	Size	Cat No.	Type
Tumour Marker Control (Level 1)	5 x 2 ml	BXC0792A	Lyo.
Tumour Marker Control (Level 2)	5 x 2 ml	BXC0792B	Lyo.
Tumour Marker Control SET (2-Levels)	2 x 1 x 2ml	BXC0793A	Lyo

Vitamin-D Calibrators & Controls

- Liquid Stable product stable to expiry at 2-8 °C.
- Open vial stability of 30 days at 2-8°C.

Description	Size	Cat No.	Type
Vitamin-D Calibrator Set (5 Levels)	5 x 1 x 1ml	BXC0475A	LS.
Vitamin-D Control Set (2 levels)	2 x 1 x 1ml	BXC0474A	LS.

SAA Control

- Lyophilised for long shelf life, stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.

Description	Size	Cat No.	Type
SAA Control	3 x 1 ml	BXC0703A	Lyo.

Infectious Diseases

Infectious diseases controls are crucial in diagnostics for ensuring the accuracy and reliability of tests that identify and quantify pathogens, such as bacteria, viruses, fungi, and parasites, in biological samples. These controls consist of standardised samples containing known concentrations of specific pathogens or their genetic material, which are used to validate the performance of diagnostic assays like polymerase chain reaction (PCR) tests and enzyme immunoassays.

The Fortress Infectious Diseases Controls are available in a liquid stable format for convenience and ease-of-use, being made from 100% human serum to negate matrix effects. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

COVID-19 Antigen Controls

Description	Size	Cat No.	Type
COVID-19 Antigen Control Pair (Positive and Negative Control)	2 x 1 x 0.5ml	COVIDNPC	LS

HBsAb Control Panel

- 100% Human serum from single donors.
- The panel is supplied in 5 levels.
- Open vial stability of 60 days when stored at 2-8 °C without contamination.
- HBsAg Controls have the following concentrations; L1 0.2IU/ml, L2 0.5IU/ml, L3 1.0IU/ml, L4 2.0IU/ml, L5 4.0IU/ml.

Description	Size	Cat No.	Type
HBsAb Control Panel (2 Levels)	2 x 1 x 0.5ml	BXC0805A	LS
HBsAb Control Panel (5 Levels)	5 x 1 x 0.5ml	BXC0800A	LS

HCV Antibody Control Panel

- The control panel is supplied as a liquid panel stable up to expiry at 2-8 °C.
- 100% Human serum
- The panel is supplied in 4 levels.
- Open vial stability: 30 days at 2-8 °C without contamination.

Description	Size	Cat No.	Type
HCV Antibody Control Panel (4 Levels)	4 x 1 x 0.5ml	BXC0804A	LS

HE4

Description	Size	Cat No.	Type
HE4 (Level 1)	1 x 0.25ml	BXC0425A	Lyo.
HE4 (Level 2)	1 x 0.25ml	BXC0425B	Lyo.

HIV-I Antibody Control Panel

- The control panel is supplied as a liquid panel stable up to expiry at 2-8 °C.
- 100% Human serum
- The panel is supplied in 4 levels.
- Open vial stability: 30 days at 2-8 °C without contamination.

Description	Size	Cat No.	Type
HIV-I Antibody Control Panel (4 Levels)	4 x 1 x 1ml	BXC0802A	LS

HIV-I Antigen (p24) Control Panel

- The Control Panel is supplied as a liquid panel stable up to expiry at 2-8 °C.
- 100% Human serum from single donors.
- The panel is supplied in 4 levels.
- Open vial stability: 30 days when stored at 2-8 °C without contamination.

Level 1 1.25U/ml
Level 2 2.50U/ml
Level 3 5.00U/ml
Level 4 10.00U/ml

Description	Size	Cat No.	Type
HIV-I Antigen (p24) Control Panel (4 Levels)	4 x 1 x 0.5 ml	BXC0803A	LS

IFN-γ Control

Description	Size	Cat No.	Type
IFN-γ Control	3 x 1 ml	BXC0702A	Lyo.

Procalcitonin Control

Description	Size	Cat No.	Type
Procalcitonin Control Set (2 Levels)	2 x 1 x 1ml	BXC0595A	Lyo.

Protein Control

- This control is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- Values are assigned by reference laboratories based.
- Values for Immunoglobulin, Inflammatory proteins, Complements, Carrier and Storage proteins are available in the control.
- 100% Human material designed for matrix conformity.
- Once opened the control is stable for a period of 30 days when stored without contamination at 2-8 °C.
- Liquid Ready to Use.

Description	Size	Cat No.	Type
Liquid Assayed Specific Protein Control (Level 1)	1 x 1 ml	BXC0641A	LS
Liquid Assayed Specific Protein Control (Level 2)	1 x 1 ml	BXC0642A	LS
Liquid Assayed Specific Protein Control (Level 3)	1 x 1 ml	BXC0643A	LS
Liquid Assayed Specific Protein Control (Levels 1,2,3)	3 x 1 x 1ml	BXC0640A	LS
Specific Protein Calibrator (L6)	1 x 1 ml	BXC0644A	LS
Specific Protein Calibrator Set (L1-L6)	6 x 1 x 1ml	BXC0646A	LS

Retinol Binding Protein Control

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Retinol Binding Protein Control	1 x 1 ml	BXC0995A	LS

Syphilis Control Panel

- The Control Panel is supplied as a liquid panel stable up to expiry at 2-8 °C.
- 100% Human serum from single donors.
- The panel is supplied in 6 levels.
- Open vial stability: 30 days when stored at 2-8 °C without contamination.

Description	Size	Cat No.	Type
Syphilis Control Panel (6 Levels)	6 x 1 x 0.5ml	BXC0806A	LS
Syphilis Negative Control	2 x 0.5 ml	BXC0808A	LS

Torch Controls Negative

- The Fortress TORCH Control Negative is intended for use in monitoring the specificity of TORCH Assays to rule out false positive reactions.
- The Control is supplied in a liquid stable format stable up to expiry at 2-8 °C.
- For use on all major systems

Description	Size	Cat No.	Type
TORCH Control Negative	3 x 1 ml	BXC0799A	LS

Torch Controls Positive

- The Fortress TORCH Control Positive is intended for use in monitoring precision of TORCH Assays.
- The control is supplied in a liquid stable format.
- The control is stable up to expiry at 2-8 °C.
- Values are assigned in Reference Laboratories.
- TORCH-IgM controls are supplied individually to prevent cross-reactivity.
- TORCH-IgG controls are supplied together / vial.
- For use on all major systems

Analytes

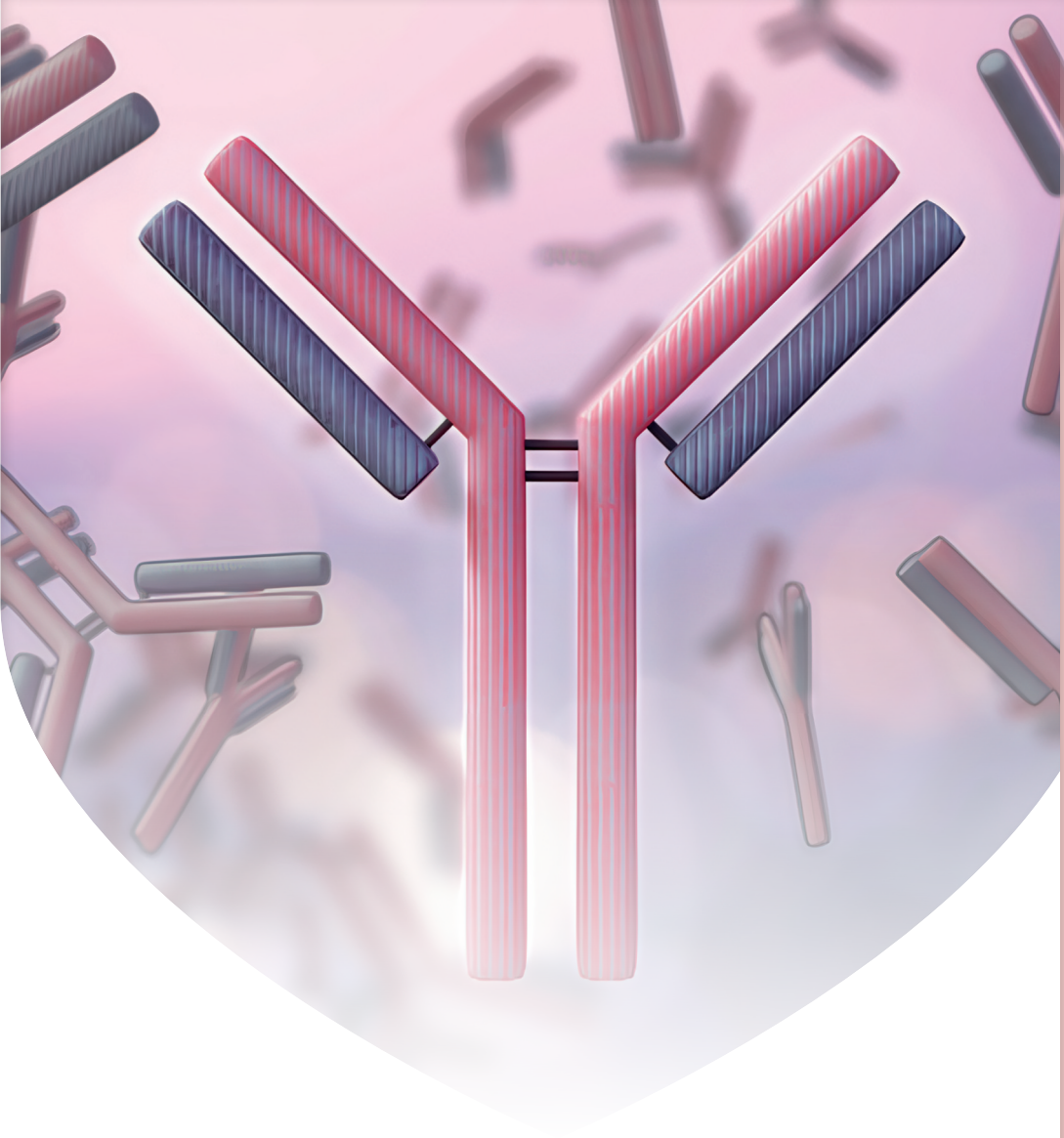
IgG		IgM	
Toxoplasma Gondii IgG	HSV -2 IgG	Toxoplasma Gondii IgM	HSV-1 IgM
Rubella IgG	VZV IgG	Rubella IgM	HSV-2 IgM
CMV IgG	EBV IgG	CMV IgM	**Syphilis RPR**
HSV-1 IgG	Syphilis IgG		

Description	Size	Cat No.	Type
TORCH IgG Control Positive	3 x 1 ml	BXC0799B	LS
TORCH IgM Control Positive	5 x 1 x 1 ml	BXC0799C	LS

Xanthochromia Quality Control

- Lyophilised format for convenience and longer shelf life.
- Human Based Material.
- True Third Party control providing unbiased assessment of performance.
- Open reconstituted Vial stability of 2 days at 2° to 8°C. Stable for 1 year when stored unopened at 2° to 8°C.

Description	Size	Cat No.	Type
Xanthochromia Positive Control	3 x 1 ml	BXC0355A	Lyo



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SECTION 14

IMMUNOLOGY/ PROTEINS

Immunology Controls

Immunology and protein controls are essential in diagnostics for ensuring the accuracy and reliability of tests that assess various immune responses and protein levels in biological samples. These controls consist of standardised samples with known concentrations of specific proteins or antibodies, utilised to validate the performance of assays such as enzyme-linked immunosorbent assays (ELISA) and Western blots.

The majority of the Fortress Immunology/Protein Controls are available in a liquid stable format for convenience and ease-of-use and are supplied with instrument and method specific assigned values.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

APO A1/B Calibrator Series



- Liquid Stable, long shelf life, stable to expiry at 2-8 °C. (Unopened)
- Open vial stability of 30 days, at 2-8°C.

Description		Size	Cat No.	Type
APO A1/B Calibrator Series	*Immunoturbidimetric*	6 x 1 x 1 ml	BXC0413A	LS.

ASO (Single Point) Calibrators



- Values are assigned by in house methods and instruments.
- 100% human material designed for matrix conformity.
- The liquid stable ASO Single point calibrator has a shelf life of 2 years when stored at 2-8 °C.
- Once opened the calibrator is stable for a period of 30 days when stored without contamination at 2-8 °C.

Description		Size	Cat No.	Type
ASO (Single Point) Calibrator	*Immunoturbidimetric*	1 x 1 ml	BXC0323A	LS
ASO (Single Point) Calibrator	*Immunoturbidimetric*	3 x 1 ml	BXC0323B	LS

ASO, CRP, RF Control



- This control is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The values are assigned in Reference Laboratories.
- 100% Human serum designed for matrix conformity.
- Once opened the control is stable for a period of 30 days when stored without contamination at 2-8 °C.
- This material is presented in a liquid stable format and is stable up to expiry at 2-8 °C.

Description		Size	Cat No.	Type
ASO, CRP, RF Control	*Immunoturbidimetric*	3 x 1 ml	BXC0645A	LS

CRP Controls & Calibrators



- This control is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The values are assigned in Reference Laboratories.
- 100% Human serum designed for matrix conformity.
- Once opened the control is stable for a period of 30 days when stored without contamination at 2-8 °C.

Description		Size	Cat No.	Type
CRP (Single Point) Calibrator	*Immunoturbidimetric*	3 x 1 ml	BXC0324A	LS
CRP (Multi Point) Calibrator	*Immunoturbidimetric*	6 x 1 x 1 ml	BXC0324B	LS
CRP (ULTRA SENSITIVE) Low Control	*Immunoturbidimetric*	3 x 1 ml	BXC0325A	LS
CRP (ULTRA SENSITIVE) Standard Set	*Immunoturbidimetric*	5 x 1 x 0.5 ml	BXC0327A	LS

Description	Size	Cat No.	Type
CRP Control (Level 1)	5 x 1 ml	BXC0326A	LS
CRP Control (Level 2)	5 x 1 ml	BXC0326B	LS
CRP Control Set	2 x 1 x1 ml	BXC0326C	LS

ESR Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.
- To be used with all routine ESR instruments

Description	Size	Cat No.	Type
ESR Control (Level 1)	2 x 10 ml	BXC0631A	LS
ESR Control (Level 2)	2 x 10 ml	BXC0632A	LS

IgE Calibrators & Controls

- Lyophilised product stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.
- Reconstituted stability of 30 days at -20°C.

Description	Size	Cat No.	Type
IgE Calibrator	1 x 1 ml	BXC0752A	Lyo.
IgE Control Set (Level 1 & Level 2)	2 x 1 x 1ml	BXC0753A	Lyo.

Retinol Binding Protein Control

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Retinol Binding Protein Control	1 x 1 ml	BXC0995A	LS

SAA Control

- Lyophilised for long shelf life, stable to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8°C.

Description	Size	Cat No.	Type
SAA Control	3 x 1 ml	BXC0703A	Lyo.

RF (Multi-Point) Calibrators

- This Calibrator is presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- The Calibrator is presented as a single level calibrator which can be diluted as necessary for calibrating RF Turbidimetric Assays.
- Values are assigned by in house methods and instruments.
- 100% human material designed for matrix conformity.
- Once opened the control is stable for a period of 30 days. when stored without contamination at 2-8 °C.

Description		Size	Cat No.	Type
RF (Multi-Point) Calibrator	*Immunoturbidimetric*	1 x 2ml	BXC0612A	LS
RF (Multi-Point) Calibrator	*Immunoturbidimetric*	3 x 2ml	BXC0612B	LS

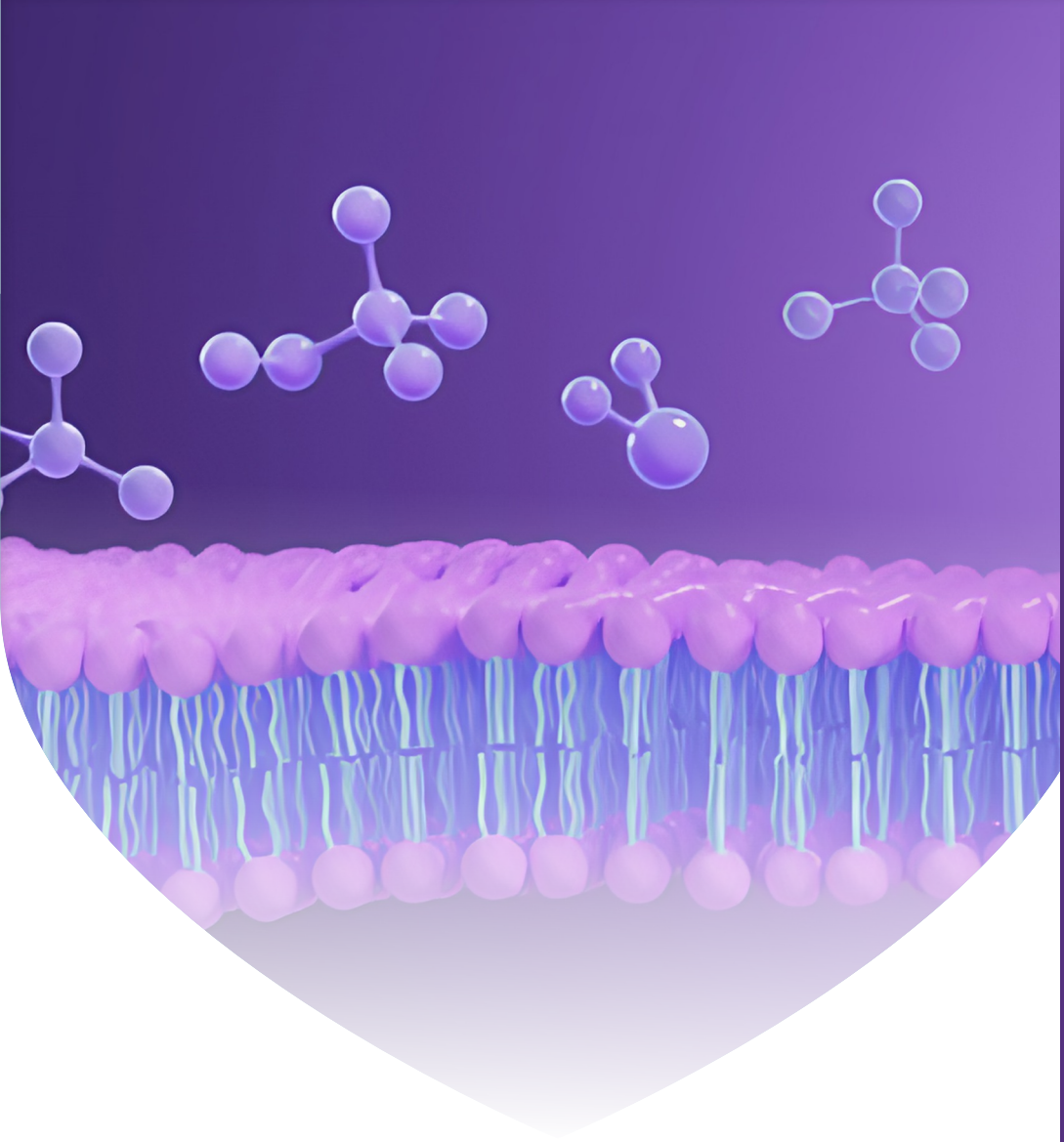
Specific Protein Calibrators

- Fortress Specific Protein Calibrator is a single level multi-analyte calibrator for use in automated systems with auto dilution facility.
- Fortress Specific Protein Calibrator set is a multi analyte multi level calibrator set for calibrating protein assays.
- Both the Calibrators are presented in a liquid stable format and is stable up to expiry when stored at 2-8 °C.
- 100% Human material designed for matrix conformity.
- Once opened, the calibrator is stable (Ready-to-use) for a period of 30 days when stored without contamination at 2-8 °C.

Analytes

Albumin Alpha-1 Acid Glycoprotein Alpha-1 Antitrypsin Alpha-2 Macroglobulin ASO Antithrombin-III Beta-2-Microglobulin	CRP C1q Inactivator C1 Esterase Inhibitor Ceruloplasmin Complement C3 Complement C4 Ferritin Haptoglobin	IgA IgG IgM IgE Kappa Light Chains Retinol Binding Protein Free Kappa Light Chain Rheumatoid Factor	Lambda Light Chains Prealbumin Free Lambda Light Chain Transferrin Total Protein

Description	Size	Cat No.	Type
Liquid Assayed Specific Protein Control (Level 1)	1 x 1ml	BXC0641A	LS
Liquid Assayed Specific Protein Control (Level 2)	1 x 1ml	BXC0642A	LS
Liquid Assayed Specific Protein Control (Level 3)	1 x 1ml	BXC0643A	LS
Liquid Assayed Specific Protein Control (Levels 1,2, 3)	3 x 1 x 1 ml	BXC0640A	LS
Specific Protein Calibrator (L6)	1 x 1 ml	BXC0644A	LS
Specific Protein Calibrator Set (L1-L6)	6 x 1 x 1 ml	BXC0646A	LS



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SECTION 15

LIPIDS

Lipid Controls

Lipid controls are essential in diagnostics for accurately measuring lipid levels, such as cholesterol and triglycerides, in biological samples. These controls consist of standardized samples with known lipid concentrations, which validate the performance of assays used in lipid testing.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Glycerol Control

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Glycerol Control	2 x 5 ml	BXC0278A	LS.

HDL/LDL Calibrators

- Fortress HDL/LDL Cholesterol Calibrator is presented in a Lyophilised format for enhanced stability, stable up to expiry at 2-8 °C.
- Once opened and reconstituted the control is stable for 7 days at 2-8 °C, or 30 days at -20 °C.
- 100% human material designed for matrix conformity.

Analytes

HDL Cholesterol (Direct)	LDL Cholesterol (Direct)

Description	Size	Cat No.	Type
HDL/LDL Calibrator	3 x 1 ml	BXC0315D	Lyo.
HDL/LDL Calibrator	1 x 1 ml	BXC0315E	Lyo.

Lipid Controls

- The Fortress Lipid Controls are intended for monitoring accuracy and precision.

Analytes

Apolipoprotein A1 Apolipoprotein B Cholesterol	HDL Cholesterol (Precipitation) HDL Cholesterol (Direct) LDL Cholesterol (Direct)	LDL Cholesterol (Precipitation) & Triglycerides

Description	Size	Cat No.	Type
Lipid Control Level 1 **(Cholesterol, Triglycerides, APO A1, APO B, HDL, LDL)**	3 x 1 ml 5 x 3 ml	BXC0317A BXC0347A	Lyo.
Lipid Control Level 2 **(Cholesterol, Triglycerides, APO A1, APO B, HDL, LDL)**	3 x 1 ml 5 x 3 ml	BXC0330A BXC0348A	Lyo.
Lipid Control Level 3 **(Cholesterol, Triglycerides, APO A1, APO B, HDL, LDL)**	3 x 1 ml 5 x 3 ml	BXC0316A BXC0349A	Lyo.
Lipid Control Set (TRI-LEVELS) **(Cholesterol, Triglycerides, APO A1, APO B, HDL, LDL)**	3 x 1 x 1 ml	BXC0350A	Lyo.



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SECTION 16

MATERNAL SCREENING

Maternal Screening Controls

Maternal screening controls are essential in diagnostics for accurately assessing the health of pregnant individuals and identifying potential risks to the developing fetus. These controls consist of standardised samples with known concentrations of biomarkers, such as hormones and proteins, used to validate the performance of screening assays. By incorporating these controls, laboratories ensure the reliability and accuracy of test results, which are crucial for detecting conditions like gestational diabetes, preeclampsia, and chromosomal abnormalities, thereby informing timely clinical interventions.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Anti-Mullerian Hormone (AMH) Calibrators & Controls

- Lyophilised for enhanced stability
- Stable to expiry printed on the vial at 2–8°C
- Open vial stability after reconstitution: 5 Days

Description	Size	Cat No.	Type
Anti-Mullerian Hormone (AMH) Control Set	2x1x0.5ml	BXC0909Av	Lyo.

Maternal Screening Control

For screening of Down's syndrome & Spina Bifida compatible for use on most clinical chemistry systems including immunoassay systems.

- Screening Controls are multi analyte controls intended for use in monitoring accuracy and precision for assays used in first and second trimester screening of Downs Syndrome and Spina Bifida.
- The Controls are provided in a Lyophilised format stable up to expiry at 2-8 °C.
- Reconstituted stability of 7 days at 2-8 °C.
- 100% human serum.

Analytes

AFP	Inhibin A	Total hCG
Free beta hCG	PAPP-A	Unconjugated Estriol

Description	Size	Cat No.	Type
Maternal Screening Control (Level 1)	2 x 1 ml	BXC0695A	Lyo.
Maternal Screening Control (Level 2)	2 x 1 ml	BXC0695B	Lyo.
Maternal Screening Control (Level 3)	2 x 1 ml	BXC0695C	Lyo.
Maternal Screening Control Tri-Level	3 x 1 x 1 ml	BXC0699A	Lyo.

PAPP-A & f-beta-hCG Controls

- The Controls are provided in a Lyophilised format stable up to expiry at 2-8 °C.
- 100% human serum.
- Reconstituted stability of 7 days at 2-8 °C.

Description	Size	Cat No.	Type
PAPP-A & f-beta-hCG Control (Level 1)	1 x 0.5 ml	BXC0337A	Lyo.
PAPP-A & f-beta-hCG Control (Level 2)	1 x 0.5 ml	BXC0338A	Lyo.
PAPP-A & f-beta-hCG Control (Level 3)	1 x 0.5 ml	BXC0339A	Lyo.
PAPP-A Control	1 x 0.5 ml	BXC0240A	Lyo.
Maternal Total hCG Control level-1	2 x 1 ml	BXC0686A	Lyo.
Maternal Total hCG Control level-2	2 x 1 ml	BXC0686B	Lyo.
Maternal Total hCG Control level-3	2 x 1 ml	BXC0686C	Lyo.
Maternal Total hCG Control Tri-level	3 x 1 x 1 ml	BXC0686D	Lyo.

Paediatric Control

- L
- R
- C

Description	Details	Size	Cat No.	Type
Paediatric Control	**ALP, Bilirubin, Calcium, Chloride, Magnesium, In. Phosphorous, Potassium, Sodium**	3 x 1ml	BXC0807A	Lyo.

Pre-eclampsia/PLGF

Pre-eclampsia is a disorder of pregnancy that is associated with new-onset hypertension most often after 20 weeks' gestation and frequently near term. During the 2nd and 3rd trimesters soluble fms-like tyrosine kinase 1 and Placental Growth Factor (PLGF) are both predictive and diagnostic for pre-eclampsia. It has been shown that increased levels of sFlt-1 and decreased levels of PlGF in maternal serum can predict the subsequent onset of pre-eclampsia..

Determining serum PLGF concentration, used as a single marker, or sFlt-1 and PLGF, used as a ratio, improve the clinical management and decision making (risk stratification) with women showing signs and symptoms of pre-eclampsia.

PlGF Testing will be valuable:

- For testing women with signs and symptoms of pre-eclampsia after week 20 of gestation
- To help Rule-out and Rule-in suspected pre-eclampsia
- To monitor women that are at high risk for pre-eclampsia
- To confirm clinical suspicion of pre-eclampsia with symptomatic women and/or to confirm unclear diagnosis of pre-eclampsia
- Serum concentrations of sFlt-1 and PLGF can differentiate healthy women from women with pre-eclampsia. Changes in sFlt-1 and PLGF levels reflect the severity of the disease.

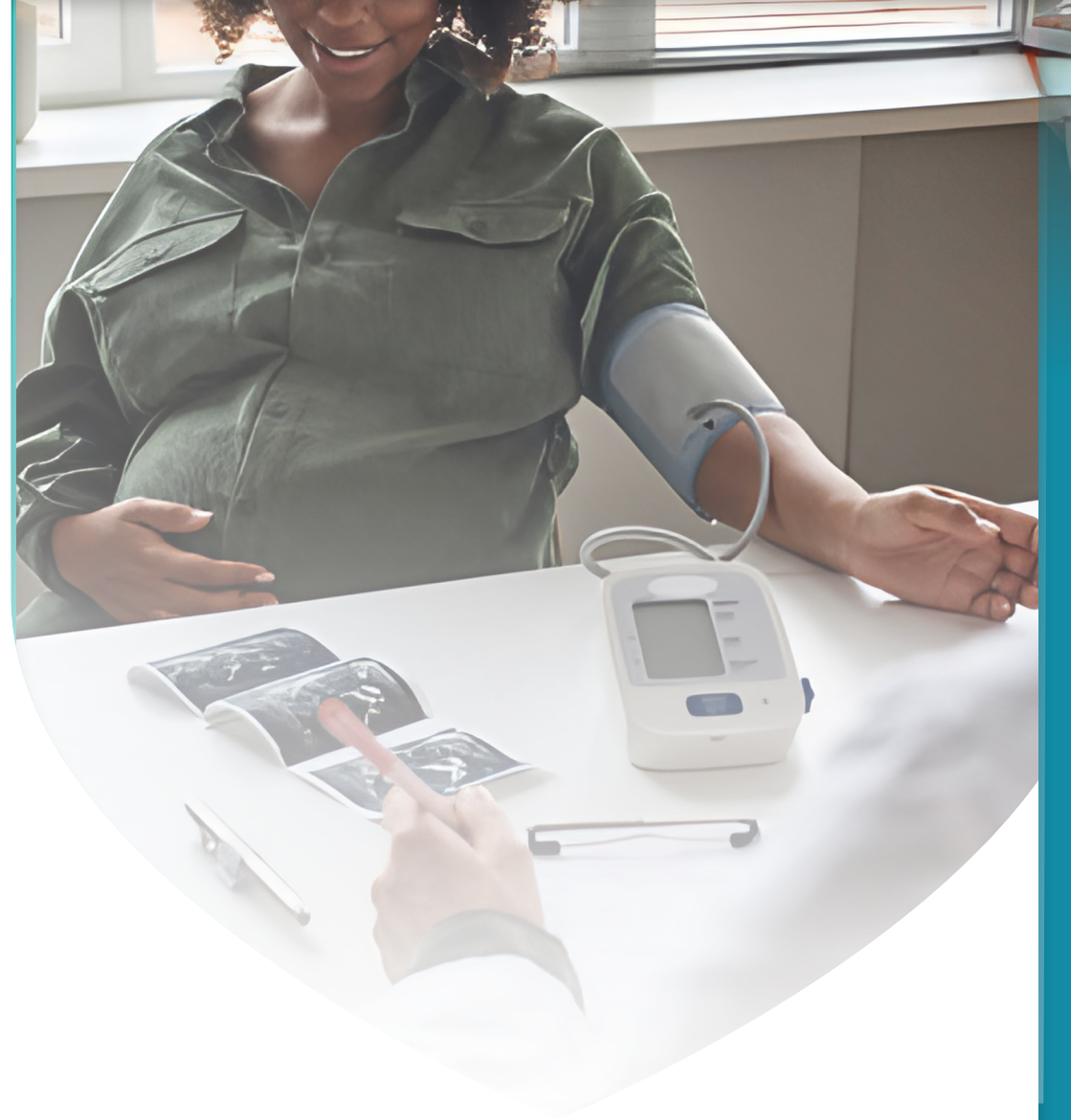
PLGF as a single marker or sFlt-1/PLGF ratio. PLGF alone compared to sFlt-1/PLGF ratio for pre-eclampsia rule-in and rule-out has a comparable performance, and both options are equally recommended for clinical use. In addition to SFlt-1/PLGF ratio, PLGF alone, with concentration based cut-offs, could provide more simpler and affordable alternative to dual biomarker testing. Using PLGF has additional advantages. Studies have shown that PLGF is a good marker (decreased serum PLGF level) for identifying pregnancies with placental insufficiency including fetal growth restriction and/or stillbirth

PLGF Controls

For screening of Down's syndrome & Spina Bifida compatible for use on most clinical chemistry systems including immunoassay systems.

Description	Details	Size	Cat No.	Type
Placental Growth Factor (PLGF) Control Level-2	**Target: 100pg/ml**	3 x 2 ml	BXC0700B	LS.
Placental Growth Factor (PLGF) Control Level-3	**Target: 600pg/ml**	3 x 2 ml	BXC0700C	LS.

Analytes			
Lipemia	Icterus	Haemolysis	
Description	**Details**	**Cat No.**	**Size**
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	BXC0599F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	BXC0600F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Roche Series	BXC0604F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Roche Series	BXC0605F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Abbott Series	BXC0606F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Abbott Series	BXC0607F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Vitros Series	BXC0608F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Vitros Series	BXC0609F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Siemens Series	BXC0615F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Siemens Series	BXC0616F	3 x 4 x 5 ml



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SECTION 17

Pre-eclampsia Controls

Pre-eclampsia Controls

Pre-eclampsia is a disorder of pregnancy that is associated with new-onset hypertension most often after 20 weeks' gestation and frequently near term. During the 2nd and 3rd trimesters sFlt-1 and PLGF are both predictive and diagnostic for pre-eclampsia. It has been shown that increased levels of sFlt-1 and decreased levels of PLGF in maternal serum can predict the subsequent onset of pre-eclampsia.

Determining serum PLGF concentration, used as a single marker, or sFlt-1 and PLGF, used as a ratio, improve the clinical management and decision making (risk stratification) with women showing signs and symptoms of pre-eclampsia. (Lecarpentier et al 2016; Annals of Endocrinology; Zeisler et al, 2016; New England Journal of Medicine)

PLGF Testing will be valuable:
- For testing women with signs and symptoms of pre-eclampsia after week 20 of gestation
- To help Rule-out and Rule-in suspected pre-eclampsia
- To monitor women that are at high risk for pre-eclampsia
- To confirm clinical suspicion of pre-eclampsia with symptomatic women and/or to confirm unclear diagnosis of pre-eclampsia
- Serum concentrations of sFlt-1 and PLGF can differentiate healthy women from women with pre-eclampsia. Changes in sFlt-1 and PLGF levels reflect the severity of the disease.

PLGF as a single marker or sFlt-1/PLGF ratio. PLGF alone compared to sFlt-1/PLGF ratio for pre-eclampsia rule-in and rule-out has a comparable performance, and both options are equally recommended for clinical use. In addition to SFlt-1/PLGF ratio, PLGF alone, with concentration based cut-offs, could provide more simpler and affordable alternative to dual biomarker testing. Using PLGF has additional advantages. Studies have shown that PLGF is a good marker (decreased serum PLGF level) for identifying pregnancies with placental insufficiency including fetal growth restriction and/or stillbirth. (Giblin et al 2020; Pregnancy Hypertension; Sherrell et al 2018; Eur. J. Obstet Gynecol Reprod Biol)

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Pre-Eclampsia Controls

- Liquid Frozen format.
- True Third Party Control providing unbiased assessment of performance
- Open Vial Stability of 5 Days at 2–8°C.
- Stable for 2 years when stored unopened at -18°C to -20°C.
- Placental Growth Factor (PLGF) CONTROLS LEVEL-2 & LEVEL-3.
- Short-term prediction and AID IN THE DIAGNOSIS OF PRE-ECLAMPSIA MANAGEMENT (11–13 Week Gestation).

HIGH Concentration	MEDIUM Concentration	LOW Concentration
≥ 150pg/ml	50-150 pg/ml	<50pg/ml
Rule out Pre-eclampsia	Short-term prediction	Rule-in Pre-eclampsia

Description	Size	Cat No.	Type
PLGF (Pre-Eclampsia) Control level-2	5 x 2 ml	BXC0700B	Liquid Frozen
PLGF (Pre-Eclampsia) Control level-3	5 x 2 ml	BXC0700C	Liquid Frozen
PLGF (Pre-Eclampsia) Control level 2 & 3	2 x 3 x 2 ml	BXC0700A	Liquid Frozen



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SECTION 18

NEONATAL SCREENING

Neonatal Screening Controls

Neonatal screening controls are essential in diagnostics for ensuring the accuracy and reliability of tests that detect metabolic and genetic disorders in newborns, enabling timely interventions that can prevent serious health issues and improve long-term outcomes.

The Fortress Neonatal Screening Controls are dried blood spot (DBS) which ensures accurate, reliable and repeatable results.

BCAA (Leucine) Calibrators & Controls

Description	Size	Cat No.	Type
BCAA (Leucine) Calibrator	**2 x 1 Disc**	BXC0067A	Disc
BCAA (Leucine) (Level 1)	**2 x 1 Disc**	BXC0068A	Disc
BCAA (Leucine) (Level 2)	**2 x 1 Disc**	BXC0068B	Disc
BCAA (Leucine) (Level 3)	**2 x 1 Disc**	BXC0068C	Disc
BCAA (Leucine) (Level 4)	**2 x 1 Disc**	BXC0068D	Disc
BCAA (Leucine) (Control Set) (4 Levels)	**4 x 1 x 2 Disc**	BXC0069A	Disc

Dried Bloodspot Calibrators on Filter Paper for Neonatal Screening

Description	Size	Cat No.	Type
Dried Bloodspot Calibrators on filter paper for Neonatal Screening	**4 x 1 x 1 Disc**	BXC0059A	Disc

G-6-PDH Controls

- Values assigned by reference Laboratories in Europe.
- Stable to expiry at 2-8 °C.
- Reconstituted stability of 5 days at 2-8 °C.
- Typical Levels:
  G-6-PDH Deficient Control : 100 - 200 U/l.
  G-6-PDH Normal Control : 900 - 1400 U/l.

Description	Size	Cat No.	Type
G-6-PDH Control (Normal)	1 x 1 ml	BXC0573B	Lyo.
G-6-PDH Control (Deficient)	1 x 1 ml	BXC0572B	Lyo.

PKU Calibrators & Controls

4 Levels of Phenylalanine.

Description	Size	Cat No.	Type
PKU Calibrator	2 x 1 Disc	BXC0064A	Disc
PKU Control (Level 1)	2 x 1 Disc	BXC0065A	Disc
PKU Control (Level 2)	2 x 1 Disc	BXC0065B	Disc
PKU Control (Level 3)	2 x 1 Disc	BXC0065C	Disc
PKU Control (Level 4)	2 x 1 Disc	BXC0065D	Disc
PKU Control Set (4 Levels)	4 x 1 x 2 Disc	BXC0066A	Disc

Total Galactose Calibrators & Controls

Description	Size	Cat No.	Type
Total Galactose Calibrator	1 x 1ml	BXC0060A	LS.
Total Galactose Control (Level 1)	1 x 1ml	BXC0061A	LS.
Total Galactose Control (Level 2)	1 x 1ml	BXC0061B	LS.
Total Galactose Control (Level 3)	1 x 1ml	BXC0061C	LS.
Total Galactose Control (Level 4)	1 x 1ml	BXC0061D	LS.
Total Galactose Control Set (4 Levels)	1 x 1ml	BXC0062A	LS.



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SECTION 19

PAEDIATRIC SCREENING

Paediatric Screening Control

Paediatric screening controls are crucial in ensuring early detection of health conditions and developmental issues in children, which allows for timely interventions that can significantly improve long-term outcomes.

The Fortress Paediatric Control is lyophilised for enhanced stability and ensures accuracy and precision. The controls are supplied with instrument and method specific assigned values.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Paediatric Control

- The Control is supplied in a Lyophilised format with a shelf life of 2 years when stored at 2-8°C.
- Reconstituted stability of 5 days at 2-8 °C.
- Excellent for clinical decision making.

Analytes

ALP Bilirubin (Total & Direct)	Calcium Chloride	Inorganic Phosphorus Magnesium	Potassium Sodium

Description	Size	Cat No.	Type
Paediatric Control	3 x 1 ml	BXC0807A	Lyo.



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SECTION 20

SPECIALITY CONTROLS

Speciality Controls

Serum indices are crucial in diagnostics for providing valuable information about the concentrations of various substances in the blood, such as proteins, enzymes, and electrolytes, which are essential for evaluating overall health and diagnosing specific conditions. These indices, which often include measures like albumin, globulin, and total protein levels, help assess organ function, nutritional status, and the presence of inflammatory or pathological processes.

The Fortress Serum Indices Controls are designed to monitor the ability of an instrument to accurately measure lipaemia, icterus and haemolysis (LIH) in specimens. The controls are 100% human serum based to negate matrix effects and are compatible with a variety of clinical chemistry analysers.

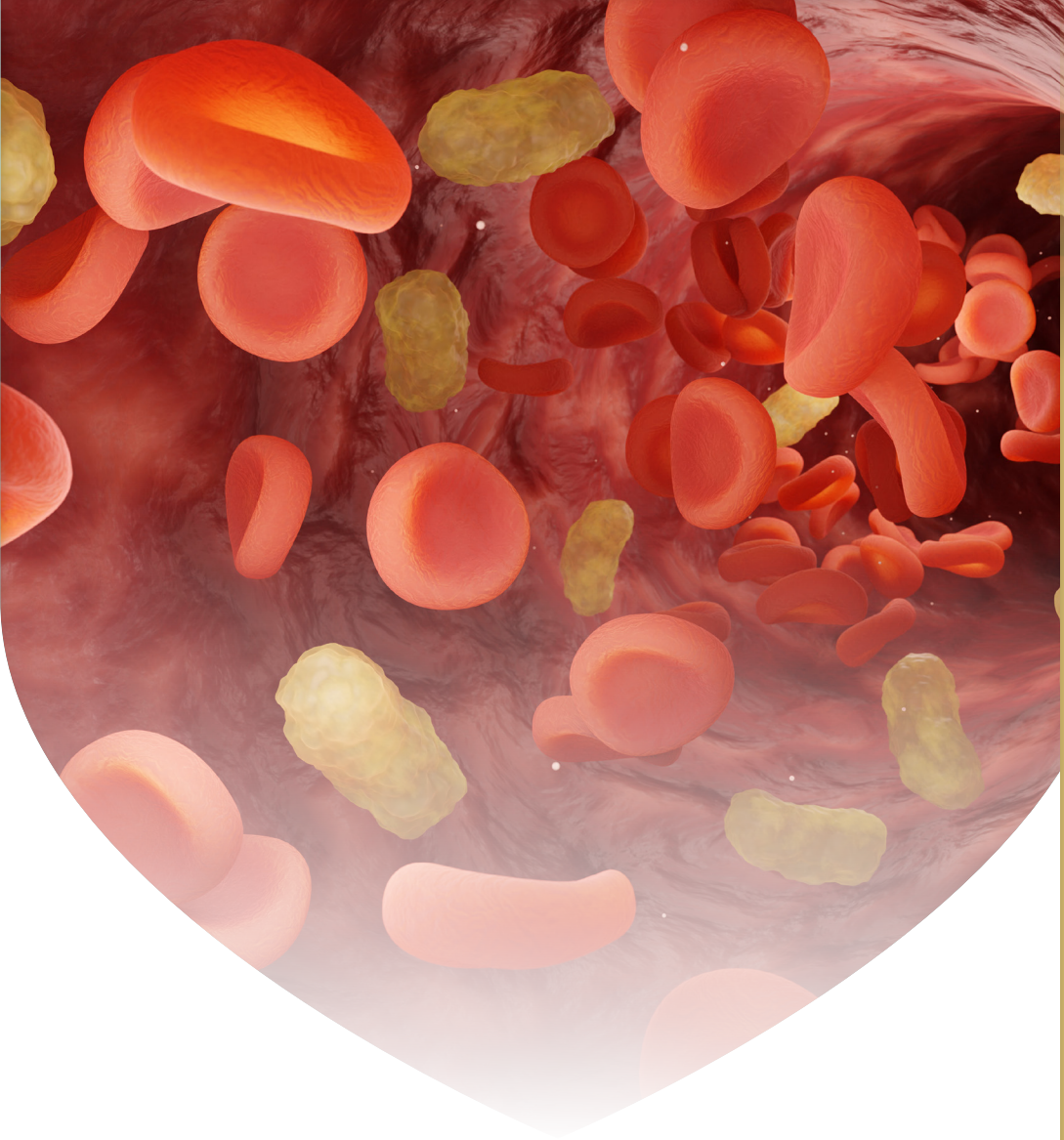
Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Serum Indices (LIH)

- Available in lyophilised and liquid stable formats.
- 100% Human based ; 4 levels available.
- Stable to expiry date at 2-8°C.
- Reconstituted stability of 14 days at 2-8 °C.

Analytes			
Lipemia	Icterus	Haemolysis	
Description	**Details**	**Cat No.**	**Size**
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	BXC0599F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	BXC0600F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Roche Series	BXC0604F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Roche Series	BXC0605F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Abbott Series	BXC0606F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Abbott Series	BXC0607F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Vitros Series	BXC0608F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Vitros Series	BXC0609F	3 x 4 x 5 ml
Serum Indices (LIH)	Lyophilised for Siemens Series	BXC0615F	3 x 4 x 5 ml
Serum Indices (LIH)	Liquid Frozen for Siemens Series	BXC0616F	3 x 4 x 5 ml





SECTION 21

THALASSAEMIA

Thalassaemia Controls

Thalassaemia controls are essential in diagnostics for accurately detecting and managing thalassaemia, a group of inherited blood disorders characterised by abnormal haemoglobin production. These controls consist of standardised samples with known haemoglobin patterns and genetic markers, utilised to validate the performance of diagnostic assays such as haemoglobin electrophoresis and molecular testing.

The Fortress Thalassaemia Controls are designed to monitor the accuracy and precision of haemoglobin variant measurements associated with thalassaemia.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Thalassaemia Controls



- Designed for monitoring accuracy and precision of Haemoglobin Variant measurements associated with Thalassaemia.
- The controls are supplied in a Lyophilised format stable up to expiry at 2-8 °C.
- 100% Human blood.

Analytes

Haemoglobin F	HPLC Haemoglobin A2	Haemoglobin S

Description	Details	Size	Cat No.	Type
HbA2 Calibrator Set (Normal & Abnormal)	Haemoglobin A2 (HbA2), Haemoglobin F (HPLC SYSTEMS)	2 x 1 x 0.5ml	BXC0664A	Lyo
Thalassaemia (HbA2) Control (Level 1)	HbA2, HbF, HbS, HbC	2 x 0.5ml	BXC0665A	Lyo
Thalassaemia (HbA2) Control (Level 2)	HbA2, HbF, HbS, HbC	2 x 0.5ml	BXC0665B	Lyo



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SECTION 22

THERAPEUTIC DRUGS

Therapeutic Drug Controls

Therapeutic drug controls are crucial in diagnostics for ensuring the accuracy and reliability of tests that measure drug levels in the bloodstream, which is essential for optimising pharmacotherapy and ensuring patient safety. These controls consist of standardised samples with known concentrations of specific therapeutic drugs, used to validate the performance of assays such as immunoassays and chromatography.

The Fortress Therapeutic Drug Controls are manufactured from 100% human serum to negate matrix effects and are lyophilised for enhanced stability.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Therapeutic Drug Monitoring



- The Fortress Therapeutic Drug Monitoring controls are intended for checking accuracy and precision.
- The controls are presented as multi analyte, lyophilised controls stable up to expiry at 2-8 °C.
- Reconstituted stability of 14 days when stored at 2-8 °C or 60 days at -20 °C.
- 100% Human serum designed for matrix conformity.

Analytes

Amikacin	Digoxin	Methotrexate	Primidone	Valproic Acid
Caffeine	**Ethosuximide**	Paracetamol	Salicylate	Vancomycin
Carbamazepine	Gentamicin	Phenobarbitone	Theophylline	
Cyclosporine	Lithium	Phenytoin	Tobramycin	

Description	Size	Cat No.	Type
Therapeutic Drug Monitoring (TDM) Control Level-1	5 x 5 ml	BXC0781A	Lyo
Therapeutic Drug Monitoring (TDM) Control Level-2	5 x 5 ml	BXC0781B	Lyo
Therapeutic Drug Monitoring (TDM) Control Level-3	5 x 5 ml	BXC0781C	Lyo
Therapeutic Drug Monitoring (TDM) Control Tri-Level	3 x 3 x 5 ml	BXC0781D	Lyo



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SECTION 23

URINE

Urine Controls

Urine controls are vital in diagnostics for ensuring the accuracy and reliability of tests that analyse urine samples, which are commonly used to evaluate kidney function, identify metabolic disorders, and screen for drugs or other substances. These controls include standardised samples with known concentrations of various analytes, such as glucose, protein, and specific gravity, which are utilised to validate the performance of assays like dipstick tests and urinalysis.

The Fortress Urine Controls are manufactured from 100% human serum to negate matrix effects and are available in both lyophilised and liquid stable formats offering flexibility to laboratories.


Lyophilised


Liquid Frozen


Liquid Stable


100% Human Serum


Assayed Target Values Provided

Citrate (Urinary) Calibrators & Controls

- The controls are presented in a Liquid format and are stable up to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Citrate (Urinary) Calibrator [200mg/L]	2 x 1 ml	BXC0136A	LS
Citrate (Urinary) Control (Level 1) [50mg/L]	2 x 1 ml	BXC0137A	LS
Citrate (Urinary) Control (Level 2) [1000mg/L]	2 x 1 ml	BXC0139A	LS

Microalbumin Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.
- 100% Human urine

Description	Size	Cat No.	Type
Microalbumin Calibrator Series	5 x 1 ml	BXC0329A	LS
Microalbumin Control (Level 1)	2 x 1 ml	BXC0328A	LS
Microalbumin Control (Level 2)	2 x 1 ml	BXC0328B	LS

Oxalate Calibrators & Controls

- Liquid Stable (Ready-to-use) stable to expiry at 2-8 °C.
- Open vial stability of 30 days, at 2-8°C.

Description	Size	Cat No.	Type
Oxalate (Urinary) Calibrator [0.5 mmol/L]	1 x 5 ml	BXC0147A	LS
Oxalate (Urinary) Control (Level 1) [0.2 mmol/L]	1 x 5 ml	BXC0148A	LS
Oxalate (Urinary) Control (Level 2) [0.7 mmol/L]	1 x 5 ml	BXC0149A	LS

Urine Assayed Controls

- Fortress Urine assayed controls are intended for monitoring precision and accuracy for Urine chemistry assays.
- The controls are presented as Lyophilised materials for increased stability, stable up to expiry at 2-8 °C.
- Values are assigned by reference laboratories in Europe.
- Reconstituted stability of 5 days 2-8 °C or 15 days at -20 °C.
- 100% human urine designed for matrix conformity.

Analytes

5HIAA	Creatinine	Microalbumin	Potassium
Amylase	Dopamine	Norepinephrine	Protein
Calcium	Epinephrine	Normetanephrine	Sodium
Chloride	Glucose	Osmolality	Urea
Copper	Magnesium	Oxalate	Uric Acid
Cortisol	Metanephrine	Inorganic Phosphorous	VMA

Description	Size	Cat No.	Type
Urine Assayed Control (Level 1)	10 x 10 ml	BXC0661A	Lyo.
Urine Assayed Control (Level 2)	10 x 10 ml	BXC0661B	Lyo.

Urine Strip Controls

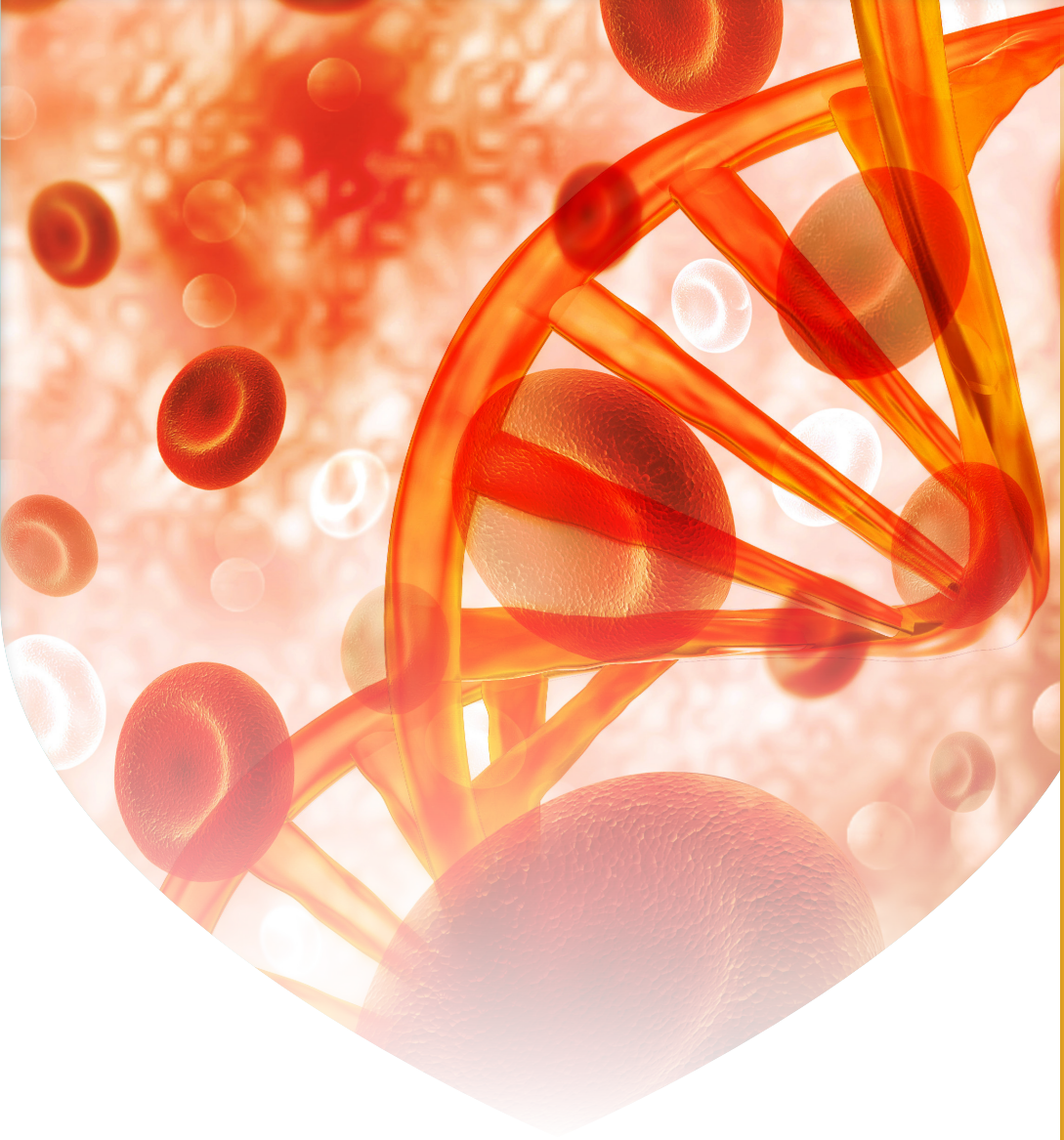
For Urine and hCG Strips Only

- Fortress urine Strip controls are designed for Urine and hCG Strips Only
- Values are assigned by in house methods.
- The Fortress Urine Strip controls are provided in a liquid stable format with a increased stability, stable up to expiry at 2-8 °C.
- Open vial stability of 30 days when stored without contamination at 2-8 °C.
- Compatible with all urine strips from a variety of manufacturers.
- Reconstituted stability of 5 days 2-8 °C or 15 days at -20 °C.
- 100% human urine designed for matrix conformity.

Analytes

Albumin	Glucose	Nitrites	Urobilinogen
Bilirubin	hCG	pH	
Creatinine	Ketones	Protein	
Blood	Leukocytes	Specific Gravity	

Description	Size	Cat No.	Type
Urine Strip Control (Level 1 & Level 2)	2 x 3 x 12 ml	BXC0663A	LS



SECTION 24

XANTHOCHROMIA

Xanthochromia Quality Controls

Xanthochromia is derived from the Greek word "xanthos," meaning yellow. The term was first used to describe the pink or yellow pigmentation of cerebrospinal fluid (CSF). This colour change is attributed to varying concentrations of pigmented compounds such as oxyhaemoglobin, bilirubin, and methaemoglobin, which are typically the by-products of red blood cell degradation.

Fortress Diagnostics has been manufacturing Xanthochromia Controls for a number of years intended for use as a true third party control in monitoring the performance of Bilirubin and Oxyhaemoglobin in Cerebrospinal Fluid. Xanthochromia Controls are supplied as unassayed and are suitable for use as IQC with various UV spectrophotometers. It is designed to deliver a cost-effective control to users.

Lyophilised | Liquid Frozen | Liquid Stable | 100% Human Serum | Assayed Target Values Provided

Xanthochromia Quality Control

- Lyophilised format for convenience and longer shelf life.
- Human Based Material.
- True Third Party control providing unbiased assessment of performance.
- Open reconstituted Vial stability of 2 days at 2° to 8°C. Stable for 1 year when stored unopened at 2° to 8°C.

Analytes	
Bilirubin	Oxyhaemoglobin

Description	Size	Cat No.	Type
Xanthochromia Positive Control	3 x 1 ml	BXC0355A	Lyo.



25

SECTION 25

IQC & EQA PROGRAMMES

Seraqual 365: IQC Management Software

The Seraqual 365 IQC Management Software is a peer data QC programme designed for use with Seraqual Controls. It provides a cost effective and comprehensive package for labs who need to manage their daily QC activities on a centralized platform in real time.

SERAQUAL 365

IQC Management Software

Simple, Easy to Use Peer Comparison Tool

Real Time Data on a Centralised Platform

Cost Effective & Comprehensive QC Data Management Software

The system has a number of features to enhance data review and trouble shooting within a lab to include:

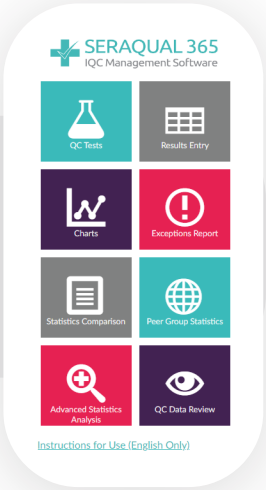
- **A dashboard interface** that presents a condensed panel of the features of the system showing options most frequented. It also flags any exceptions for review
- **A simple easy to use interface** that allow labs to configure and enter results easily with a need for minimal training
- **Interactive charts** for quick and easy performance review including Histogram and Levey –Jennings
- **Exceptions reports** so data from a specified date range can be reviewed quickly
- **Statistical Comparison Report** can be specified by date range at the instrument, method or all method level.
- **Peer Group Statistics** allowing you to compare your results with other labs using the same QC material
- **Advanced Statistical Analysis** that includes performance indicators such as Uncertainty of Measurement (UM), Bias, Total Error (TE) and Sigma Scores.



Ordering Information

Description	Cycle	Cat No.	Size
Seraqual 365 Internal Quality Assessment Programme	1 Cycle = 12 Months (1 Year License)	SERAQ00P	

Software Overview



Instructions for Use (English Only)

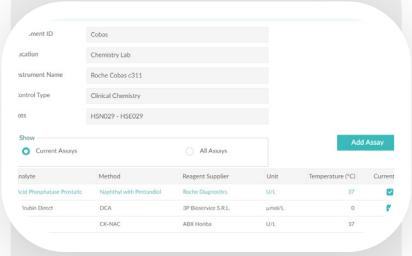
1 Dashboard

Presents a condensed panel of the features of the system showing options most frequented.

A full list of features that the system offers is available from the drop down at the top left hand corner.

It also flags any exceptions for review to allow rapid identification of any QC problems and allow quick and effective corrective action.

2 QC Tests



This option allows a lab to quickly see the instruments registered, the programmes and lots associated with these instruments and then the associated QC test.

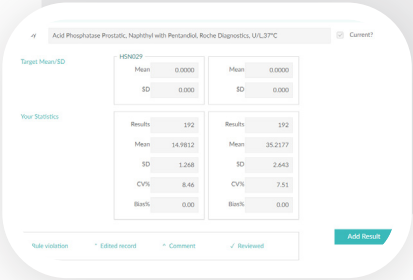
Here a lab can also set the Target mean and SD of a test (cumulative, user defined or Seraqual 365 (targets available for selected assayed lots)).

3 Result Entry

A simple feature to allow easy manual addition of results.

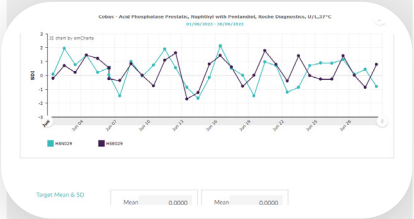
An alarm is activated if a result entered violates a multi rule set.

There are also indicators to show when a result has been edited, commented upon or reviewed.



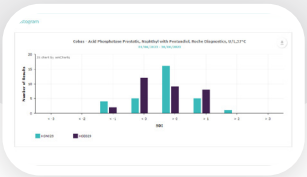
4

Charts



The Levey Jennings and Histograms interactive charts can be generated within a specific date range proving invaluable for identifying data shifts and trends.

The charts can be downloaded, saved, annotated and printed for the users convenience.



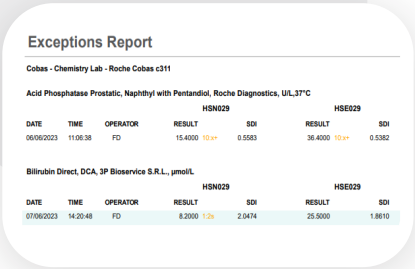
5

Exceptions Report

The Exceptions Report presents all results that have violated the multi rules set in a date range that can be specified.

Through colour coding it identifies the violated rules that are 'Alert' and those that are 'Reject'.

Any comments associated with a result are also detailed.



Exceptions Report

Cobas - Chemistry Lab - Roche Cobas c311

Acid Phosphatase Prostatic, Naphthyl with Pentandiol, Roche Diagnostics, U/L,37°C

			HSN029			HSE029	
DATE	TIME	OPERATOR	RESULT		SDI	RESULT	SDI
06/06/2023	11:06:38	FD	15.4000	10.x+	0.5583	36.4000 10.x+	0.5382

Bilirubin Direct, DCA, 3P Bioservice S.R.L., µmol/L

			HSN029			HSE029	
DATE	TIME	OPERATOR	RESULT		SDI	RESULT	SDI
07/06/2023	14:20:48	FD	8.2000	1:2s	2.0474	25.5000	1.8610

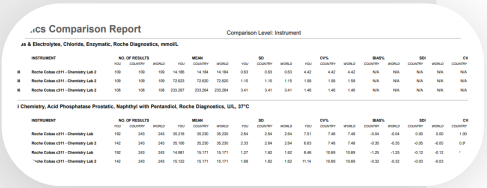
6

Statistics Comparison Report

A worldwide and country comparison of statistics at either the Instrument, Method or All Method level is available in this report.

A date range can be specified.

This report includes performance indicators such as Mean, SD, CV% and CVI.



...ics Comparison Report

Comparison Level: Instrument

...s & Electrolytes, Chloride, Enzymatic, Roche Diagnostics, mmol/L

INSTRUMENT	NO. OF RESULTS			MEAN			SD			CV%			BIAS%			SDI			CVI
	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	COUNTRY
Roche Cobas c311 - Chemistry Lab 2	109	109	109	14.186	14.184	14.184	0.63	0.63	0.63	4.42	4.42	4.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roche Cobas c311 - Chemistry Lab 2	109	109	109	72.623	72.630	72.620	1.15	1.15	1.15	1.58	1.58	1.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roche Cobas c311 - Chemistry Lab 2	108	108	108	233.267	233.204	233.264	3.41	3.41	3.41	1.46	1.46	1.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A

...l Chemistry, Acid Phosphatase Prostatic, Naphthyl with Pentandiol, Roche Diagnostics, U/L, 37°C

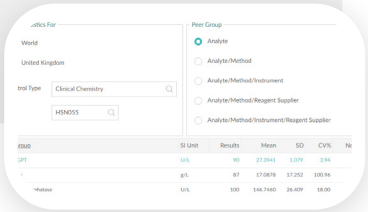
INSTRUMENT	NO. OF RESULTS			MEAN			SD			CV%			BIAS%			SDI			CVI
	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	YOU	COUNTRY	WORLD	COUNTRY
Roche Cobas c311 - Chemistry Lab	192	340	343	35.216	35.230	35.230	2.64	2.64	2.64	7.51	7.48	7.48	-0.04	-0.04	0.00	0.00	0.00	0.00	1.00
Roche Cobas c311 - Chemistry Lab 2	142	340	343	35.195	35.230	35.230	2.33	2.64	2.64	6.63	7.48	7.48	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	0.91
Roche Cobas c311 - Chemistry Lab	192	340	343	14.981	15.171	15.171	1.27	1.62	1.62	8.48	10.69	10.69	-1.25	-1.25	-0.12	-0.12	-0.12	-0.12	-
Roche Cobas c311 - Chemistry Lab 2	142	340	343	15.122	15.171	15.171	1.68	1.62	1.62	11.14	10.69	10.69	-0.32	-0.32	-0.03	-0.03	-0.03	-0.03	-

7 Peer Group Statistics

A lab can select World or Country Statistics for a chosen Control Type and Lot.

The peer group can be at a number of different levels as seen in the image.

The report includes Mean, SD, CV% and the number of labs.



8 Advanced Statistics Report

This report draws on a number of important statistical metrics that include Mean, SD, CV%, Uncertainty of Measurement (UM), Bias, TE, Sigma (BV) and Sigma (CLIA).

The report can be based at either the Instrument, Method or All Method Level and if required within a specified date range.

9 QC Data Review

A lab selects a date range (instrument, lot and assay selection is optional) and the report generated displays any results that have not yet been reviewed.

Results violating a multirule are highlighted according to their 'Alert' or 'Reject' status.

A reviewer has the ability to set all the results to reviewed or individually look at results and comment.

This function allow quick and easy identification of tests that may be problematic.

Additional Features

- Programme available in English, Spanish, Chinese, Farsi and Arabic.
- Co-ordinators have the ability to look at the Statistics Comparison Report and Advanced Statistical Analysis Report of the labs they are responsible for.
- Instruction for Use available on the Software
- Automatic deactivations of peer data to maintain the integrity of the data

For further information please contact admin@seraqual365.com

SEQAS: EQA Management Software

SEQAS is an EQA scheme that forms part of the Fortress Quality Control Platform. EQA helps to assure customers, such as physicians, patients, and health authorities, that the laboratory can produce reliable results. Individual laboratories can use EQA to identify problems in laboratory practices, allowing for appropriate corrective action. EQA participation will help to evaluate reliability of methods, materials, and equipment, and to evaluate and monitor training impact.

SEQAS
Specialised External Quality Assessment Service

For laboratories performing public health-related testing, EQA can help to assure that results from different laboratories during surveillance activities are comparable. EQA participation is usually required for accreditation. Samples received for EQA testing, as well as the information shared by the EQA provider, are useful for conducting educational and professional development activities.

Participation in an external quality assessment program provides valuable data and information for the laboratory which:

- allows peer comparison of performance and results among different test sites;
- provides early warning for systematic problems associated with kits or operations;
- provides objective evidence of testing quality;
- indicates areas that need improvement;
- identifies training needs.

A fast easy-to-use data capture system

End of cycle reports

Data analysis that is easy to understand & interpret

Certificates of registration

Monthly cycles for a range of programmes

SEQAS Programmes

Cat No.	Description	Size
SEQAS PROGRAMMES *1 CYCLE = 12 MONTHS (1 SAMPLE / MONTH)*		
SEQAS001	CLINICAL CHEMISTRY PROGRAMME	1x12x5ml
SEQAS002	IMMUNOASSAY PROGRAMME	1x12x3ml
SEQAS003	HAEMATOLOGY PROGRAMME	2x6x3ml
SEQAS004	HbA1c PROGRAMME	1x12x0.5ml
SEQAS005	COAGULATION PROGRAMME	1x12x1ml
SEQAS006	LIPIDS PROGRAMME	1x12x1ml
SEQAS007	CARDIAC PROGRAMME	1x12x2ml
SEQAS008	BLOOD GAS & ELECTROLYTE PROGRAMME	1x12x2ml
SEQAS009	SPECIFIC PROTEIN PROGRAMME	1x12x1ml
SEQAS010	URINALYSIS PROGRAMME	12x12ml
SEQAS011	MATERNAL SCREENING PROGRAMME	12x1ml
SEQAS012	SERUM INDICES PROGRAMME	4x4x5ml
SEQAS013	URINE TOXICOLOGY PROGRAMME	12x5ml
SEQAS014	THERAPEUTIC DRUG PROGRAMME	12x5ml
SEQAS015	NEONATAL BILIRUBIN SCREENING PROGRAMME	12x3ml
SEQAS016	PRE-ECLAMPSIA PROGRAMME	12x1ml
SEQAS017	IMMUNOASSAY SPECIALITY PROGRAMME	12x3ml
SEQAS018	TORCH PROGRAMME	12x1ml
SEQAS019	SYPHILIS PROGRAMME	12x1ml
SEQAS020	INFECTIOUS PROGRAMME (HIV/HCV/HBsAg /HAV/P24/ANTI-HBc/HIV-Ag-Ab)	12x1.8ml
SEQAS021	AMMONIA-ETHANOL-CO2 PROGRAMME	12x2ml
SEQAS022	AMH PROGRAMME	12x1ml
SEQAS023	BNP PROGRAMME	12x1ml
SEQAS024	ESR PROGRAMME	4x2x4.5ml
SEQAS025	CSF PROGRAMME	12x3ml
SEQAS026	HUMAN URINE PROGRAMME	1x10ml
SEQAS027	HAEMOSTASIS PROGRAMME	12x1ml

Fortress Quality Control Inserts Portal

Download e-inserts for the Fortress Diagnostics Quality Controls & Calibrators range through our online portal.

Fortress Diagnostics are excited to launch the new Fortress QC Inserts Portal. The portal allows customers to easily search our database of inserts by product name, catalogue number or batch number in our easy-to-use filter tool. Inserts can be viewed online or downloaded in PDF format.

insert.fortressdiagnostics.com



Terms & Conditions

1. General
All quotations made, all orders accepted, all goods sold, all service and advice rendered are subject to these conditions and to the exclusion of any previous conditions of purchase. Any variations to these must be expressly accepted by us in writing.

2. Specifications
We reserve the right to supply goods to the specification and/or design current at the date of dispatch. We cannot accept a request for goods as previously supplied as binding.

3. Admin & Handling Charge
An admin & handling charge of £25.00 will be added to all orders.

4. International Bank Charges
For international orders a £15.00 international bank charge will be added to all BACS payments unless the customer agrees to pay these charges at their end.

5. PayPal/Credit Card Transactions
We accept PayPal, credit card and debit card payments. There is a 3.5% PayPal processing fee added to all customer orders who choose to pay via PayPal this will be detailed on your invoice. This is the same charge that Fortress incur to receive this method of payment.

6. Prices
Although we take great care to ensure price stability, we reserve the right to change prices without notice. Goods will be invoiced at the prices valid on the date of confirmation of the Buyer's order. All prices given are exclusive of VAT unless otherwise stated.

Fortress Diagnostics cannot accept responsibility for typographical errors in pricing within our catalogues, advertising literature or quotations.

Prices quoted are "Ex Works" (Incoterms 2010). Freight, insurance and all other respective costs e.g. Certificate of origin, legalised and notarised documents will be invoiced separately.

7. Delivery
Goods are shipped or dispatched at Buyer's risk. Our standard dispatch dates are 21 days after orders are confirmed and paid in full (unless you have credit terms).

Delivery times quoted are to be treated as an estimate only and Fortress Diagnostics shall not be liable for any failure to deliver within such times whether a time for delivery be quoted or not. We shall not be held responsible for delays caused by anything beyond our reasonable control. Any special delivery requirements must be notified to us in writing at the time of placing the order.

We shall have the right at our discretion to make a reasonable charge for special handling and/or delivery.

The Seller is entitled to make delivery in instalments unless such delivery would be unreasonable or unless otherwise agreed upon and confirmed by the Seller in writing. In the case that a fixed period for delivery is agreed upon and the Seller is in default with the supply, the Buyer shall grant the Seller a reasonable additional period of time, normally of 4 weeks.

8. Order Additions
Any additions will result in a new order being created in line with our standard delivery terms. Where possible we will attempt to dispatch your order additions with your original order but cannot guarantee this.

9. Damage/Loss/Shortage
No claim for breakages or missing goods can be recognised unless notified to Fortress Diagnostics and the carriers within 72 hours of receipt of the goods. If damages or shortages are immediately apparent upon delivery please:
1. Notify the carrier when signing for receipt of the goods.
2. Advise Fortress Diagnostics customer services team as soon as possible.

In the case of non-delivery of a complete consignment notification must be received by us within 10 days of invoice date.

10. Return of Goods
Notification of returns must be made within 1 week of receipt of goods. Goods which have been received damaged or in error must be held in the correct storage conditions.

Do not return the goods until you contact our customer services team for a returned goods authorisation number. Clearly mark the authorisation number on the package to ensure your goods can be speedily processed.

You will appreciate that we cannot accept responsibility for loss or damage to goods being returned to us unless we arranged collection. If the mistake was ours there is of course no charge to you. However, if the goods were incorrectly ordered an administration and re-stocking charge of 25% of the invoice value excluding VAT is chargeable. Temperature controlled products incorrectly ordered will not normally be accepted for return.

11. VAT
We are required to charge VAT on all UK orders at the current VAT rate.

For organisations that are VAT exempt each order must be accompanied by an exemption certificate unless special arrangements have been made in writing. Under circumstances where a VAT exemption certificate does not accompany an order we are obliged by law to charge VAT. If subsequently you reclaim a VAT credit it must be completed within 30 days of invoice date.

12. Payment Terms
Payments are to be made within the agreed payment terms set with our customers. We may at our discretion charge interest at the rate of 5% above the base lending rate of Barclays Bank plc on all overdue accounts to the date of actual payment. Payment in advance or financial guarantees may be requested from customers who do not have an account.

13. Quotations
Quotations are valid for 30 days.

14. Cancellation
Orders may not be cancelled without our prior written agreement and may be subject to a cancellation charge. Standing orders must be cancelled in writing at least 8 weeks prior to what becomes the last shipment date.

15. Liability
Fortress Diagnostics' liability for any loss or damage suffered by you and arising by way of defects in the goods or otherwise, howsoever shall be limited to the invoice price of the goods in respect of or in relation to which loss or damage is claimed. Our liability under this clause shall be in lieu of any warranty or condition implied by law as to the quality or fitness for any particular purpose of the goods and save as provided.

16. Ownership
All goods remain the property of Fortress Diagnostics Limited until payment is received in full. The responsibility for insurance and care of goods, including 3rd party risks lies with the purchaser.

17. Health & Safety
All products sold by Fortress Diagnostics Limited, should be handled by qualified personnel, exercising care during handling, usage and disposal.
For further information please contact Fortress Diagnostics Limited.

Control of Substances Hazardous to Health 2002 (COSHH)

All Fortress products are developed and designed for 'IN VITRO' use only.

COSHH safety data sheets are available for all products on request.



Fortress
Diagnostics

Fortress Diagnostics

9A, The Technology Park, Antrim,
United Kingdom, BT41 1QS
+44 (0)28 9448 7676
info@fortressdiagnostics.com
fortressdiagnostics.com

BR015FORMAR26

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