

# SERUM INDICES



Fortress  
Diagnostics

## 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 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 standardization 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**

**Speciality Controls**  
**Thalassaemia**  
**Therapeutic Drugs**  
**Torch**  
**Paediatric**  
**Urine**  
**Xanthochromia**

## Serum Indices

**Interference caused by Lipaemia, Icterus and Haemolysis (LIH) which affect sample integrity is one of the most common problems observed in all clinical laboratories. Accurately measuring LIH interference levels in specimens is directly related to obtaining accurate results and to delivering the correct patient care.**

Historically, laboratories performed manual serum indices detection by visually inspecting samples. Most automated analytical platforms now have the ability to accurately measure LIH using photometric methodology, to provide qualitative or semi-qualitative results. This not only ensures uniformity but also removes subjective variability.

Fortress Serum Indices Quality Controls are designed to monitor the ability of an instrument to accurately measure LIH in specimens. This is done through the use of controls which mimic specimens considered as either lipaemic, icteric, haemolytic or normal using human based control material. Clinical Laboratories can encounter samples that show significant Lipaemia, Icterus and Haemolysis all of which, if high enough, can cause interference with clinical assays. Several diseases, diet and pre-analytical conditions can cause increased concentrations of chromogens like bilirubin, haemoglobin and lipids in serum/plasma.

The use of serum indices allows a laboratory to critically evaluate the LIH interference level of a sample and to make a decision as to whether or not a result has been potentially compromised resulting in an incorrect result being reported. The laboratory's quality of reporting can be kept to a high standard by treating LIH indices as another quantitative assay which require quality control to ensure reproducibility and reliability.

## Available Levels



**Serum Lipaemia  
Index**



**Serum Icteric  
Index**



**Serum Haemolysis  
Index**



**Serum Normal  
Index**





## Who Choose Fortress Serum Indices?

Serum indices are parameters measured in blood serum that provide valuable information about the quality and integrity of the sample. Their benefits include:



### Enhancing specimen integrity:

By assessing factors such as haemolysis, lipemia, and icterus.



### Improves the identification of pre-analytical interferences:

Helping to ensure the accuracy and reliability of test results, ultimately enhancing patient care and clinical decision-making.



### Prepared from human source material:

These closely mimic the characteristics of clinical specimens, providing accurate and reliable measurements of HIL.



### Long shelf life to reduce frequency of lot change:

Crucial for maintaining their stability and reliability over time, thereby optimizing their utility in laboratory settings.



### Available in lyophilised and frozen liquid format:

Provides flexibility to laboratories, catering to different preferences and requirements.



### Monitors instrument response to detecting lipaemic, icteric or haemolysed samples



### Compatible with a wide range of leading chemistry test instruments:

Essential for ensuring seamless integration and performance across different laboratory settings.



### When stored at:

-20 to -80 °C	24 months
+2 to +8 °C	14 days (open vial)
+2 to +8 °C	14 days (unopen vial)
-20 to -80 °C	30 days (frozen aliquot)



## Ordering Information

### Beckman Coulter Series

Description	Details	Method	Cat No.	Size	Storage
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600B	4 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Beckman Coulter Series	Lyo	BXC0599B	4 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Beckman Coulter Series	LF	BXC0600A	4 x 1 x 5 ml	2-8°C

### Roche Series

Description	Details	Method	Cat No.	Size	Storage
Serum Indices (LIH)	Lyophilised for Roche Series	Lyo	BXC0604E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Roche Series	Lyo	BXC0604D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Roche Series	Lyo	BXC0604C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Roche Series	Lyo	BXC0604B	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Roche Series	LF	BXC0605E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Roche Series	LF	BXC0605D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Roche Series	LF	BXC0605C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Roche Series	LF	BXC0605A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Roche Series	Lyo	BXC0604F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Roche Series	Lyo	BXC0604A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Roche Series	LF	BXC0605F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Roche Series	LF	BXC0605B	4 x 5 ml	2-8°C

### Abbott Series

Description	Details	Method	Cat No.	Size	Storage
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606B	4 x 5 ml	2-8°C

Description	Details	Method	Cat No.	Size	Storage
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Abbott Series	Lyo	BXC0606B	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Abbott Series	LF	BXC0607E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Abbott Series	LF	BXC0607D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Abbott Series	LF	BXC0607C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Abbott Series	LF	BXC0607A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Abbott Series	Lyo	BXC0606F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Abbott Series	Lyo	BXC0606A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Abbott Series	LF	BXC0607F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Abbott Series	LF	BXC0607B	4 x 5 ml	2-8°C

## Vitros Series

Description	Details	Method	Cat No.	Size	Storage
Serum Indices (LIH)	Lyophilised for Vitros Series	Lyo	BXC0608F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Vitros Series	Lyo	BXC0608E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Vitros Series	Lyo	BXC0608D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Lyophilised for Vitros Series	Lyo	BXC0608C	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Vitros Series	LF	BXC0609F	3 x 4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Vitros Series	LF	BXC0609E	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Vitros Series	LF	BXC0609D	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Vitros Series	LF	BXC0609B	4 x 5 ml	2-8°C
Serum Indices (LIH)	Liquid Frozen for Vitros Series	LF	BXC0609A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised for Vitros Series	Lyo	BXC0608B	4 x 5 ml	2-8°C
Serum Indices (LIHN)	Lyophilised wfor Vitros Series	Lyo	BXC0608A	4 x 1 x 5 ml	2-8°C
Serum Indices (LIHN)	Liquid Frozen for Vitros Series	LF	BXC0609C	4 x 5 ml	2-8°C

## Find Out More



### Website

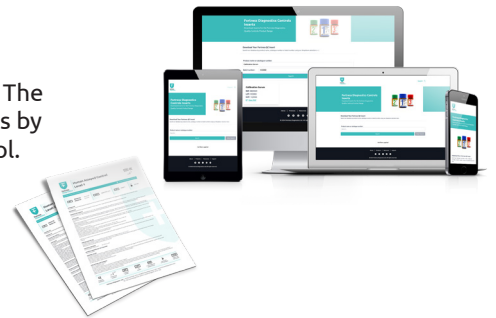
[fortressdiagnostics.com](https://fortressdiagnostics.com)

The Fortress Diagnostics website details our final 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](https://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](https://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](https://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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