

Fortress
Diagnostics



LIPID PROFILE

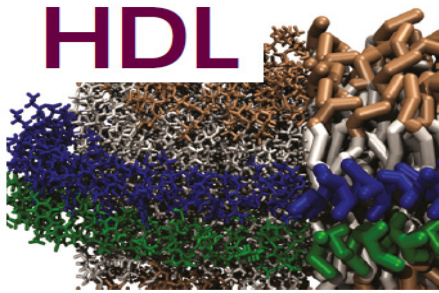
Clinical Chemistry Reagents
For the structure and function of living cells

FEATURED PRODUCTS

HDL Cholesterol Direct

Introduction

HDL Cholesterol commonly referred to as the 'good cholesterol' is a type of lipoprotein. HDL Cholesterol removes Cholesterol from tissues to the liver for excretion or reutilization. High levels of HDL Cholesterol protects the body against Cardiovascular diseases.



HDL Immunoinhibition

The Reagent 1 containing Antihuman β -lipoprotein antibody binds VLDL, Chylomicrons and LDL, leaving the HDL to react in the step 2.

In step 2, the Reagent 2 containing Cholesterol Oxidase and esterase reacts with the HDL specifically to produce a Blue colour which is measured at 600nm.

This method is linear upto 180mg/dl Interassay precision (long term) <1.8%

Interferences:

Icterus: No interference upto 50mg/dl of Bilirubin
Haemolysis: No interference upto 500mg/dl of Haemoglobin
Lipaemia: No interference upto 1000mg/dl of Triglycerides

HDL Precipitation

HDL Cholesterol Precipitation method is another choice for laboratories, wherein the low density lipoproteins are precipitated by the addition of Phosphotungstic acid in the presence of Magnesium ions. The HDL fraction remains in the supernatant and is measured by the Cholesterol assay.

LDL Cholesterol Direct

Introduction

LDL Cholesterol commonly referred to as 'bad cholesterol' is a type of lipoprotein. LDL Cholesterol transports Cholesterol and Triglycerides from the liver to the peripheral tissues.

Higher values for LDL Cholesterol indicate a Cardiovascular risk.



LDL selective Protection

LDL in the sample is protected by the addition of the Reagent 1 which contains Polyanion and Amphoteric Surfactants. Cholesterol Oxidase and esterase react with non LDL lipoproteins VLDL and HDL and the Hydrogen Peroxide liberated is decomposed by catalase.

In the step 2, the reacting solution removes the protecting reagent from LDL and the catalase is inactivated by Sodium Azide. Cholesterol Oxidase and esterase react with LDL specifically to form a blue colour complex which is measured at 600nm. This method is linear upto 400mg/dl Interassay precision (long term) <1.6%

Interferences:

Icterus: No interference upto 50mg/dl of Bilirubin
Haemolysis: No interference upto 500mg/dl of Haemoglobin
Lipaemia: No interference upto 1000mg/dl of Triglycerides

LDL Precipitation

LDL Cholesterol Precipitation method is another choice for laboratories wherein the low density lipoproteins are precipitated by the addition of heparin at their isoelectric point.

The HDL and VLDL remain in the supernatant and are determined by Enzymatic cholesterol methods. The difference between the total cholesterol in the sample and the HDL VLDL in the supernatant would give the value of LDL Cholesterol.

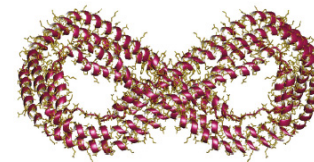
Apolipoprotein A1

Introduction

Apo A1 is the major protein component of the HDL Cholesterol. It has a physiological role due to its cofactor activity in the lecithin-cholesterol-acyl-transferase reaction and its ability to take up free cholesterol from cells. These processes are very important for the reverse cholesterol transport to the liver.

Immunoturbidimetric

The Fortress Apolipoprotein A1 assay is an immunoturbidimetric assay without sample predilution. The linearity of this assay is 300mg/dl.



APO_{A1}

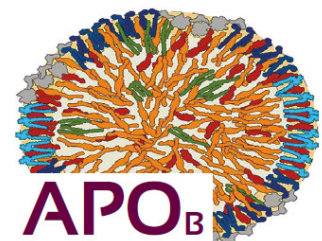
Apolipoprotein B

Introduction

Apo B is the main component of LDL and IDL, and it is also an important component of VLDL and Chylomicrons. Apo B is important for the transport of Cholesterol and triglycerides as well as for their receptor mediated cellular uptake.

Immunoturbidimetric

The Fortress Apolipoprotein B assay is an immunoturbidimetric assay without sample predilution. The linearity of this assay is 300mg/dl.



APO_B

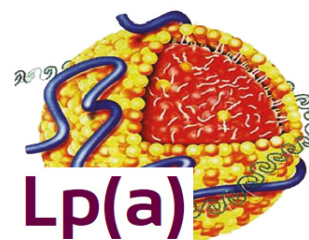
Apolipoprotein (a)

Introduction

Lp(a) is structurally similar to plasminogen and tissue plasminogen activator and it competes with plasminogen for its binding site leading to reduced fibrinolysis. High Lp(a) is a risk factor for Coronary heart disease, Cardiovascular disease, stroke, atherosclerosis and thrombosis.

Immunoturbidimetric

Fortress Lp (a) is a latex enhanced immunoturbidimetric assay without sample predilution.
The linearity of the assay is 80mg/dl.



Cholesterol and Triglycerides

Introduction

Fortress offers Cholesterol and Triglycerides reagents in Liquid and Lyophilised formats, with a linearity of 20mmol/l for Cholesterol and 11.4mmol/l for Triglycerides. Offering minimal interference from Icteric, Lipaemic and Haemolysed samples on the assays. These are ideal choices for Colorimeters, Spectrophotometers, Semi Automated and Automated analysers.

ORDERING INFORMATION

CAT NO	DESCRIPTION	METHODOLOGY	PACK SIZE	STD/CAL	TYPE
BXC0261A	TOTAL CHOLESTEROL	CHOD PAP	2x60ml	1x5ml	LIQUID
BXC0261B	TOTAL CHOLESTEROL	CHOD PAP	6x60ml	1x5ml	LIQUID
BXC0261C	TOTAL CHOLESTEROL	CHOD PAP	8x250ml	1x5ml	LIQUID
BXC0261D	TOTAL CHOLESTEROL	CHOD PAP	4x250ml	1x5ml	LIQUID
BXC0262A	TOTAL CHOLESTEROL	CHOD PAP	2x105/10x20ml	1x5ml	LYO
BXC0262B	TOTAL CHOLESTEROL	CHOD PAP	10x50/10x50ml	1x5ml	LYO
HIT0261H	TOTAL CHOLESTEROL	CHOD PAP	12x50ml	1x5ml	HITACHI
HIT0261J	TOTAL CHOLESTEROL	CHOD PAP	5x100ml	1x5ml	HITACHI
BXC0271A	TRIGLYCERIDES	GPO PAP	2x60ml	1x5ml	LIQUID
BXC0271B	TRIGLYCERIDES	GPO PAP	4x60ml	1x5ml	LIQUID
BXC0271C	TRIGLYCERIDES	GPO PAP	5x20ml	1x5ml	LIQUID
BXC0271D	TRIGLYCERIDES	GPO PAP	12x60ml	1x5ml	LIQUID
BXC0272A	TRIGLYCERIDES	GPO PAP	1x105/10x10ml	1x5ml	LYO
BXC0272B	TRIGLYCERIDES	GPO PAP	2x105/10x20ml	1x5ml	LYO
BXC0272C	TRIGLYCERIDES	GPO PAP	4x50/4x50ml		LYO
HIT0271E	TRIGLYCERIDES	GPO PAP	12x50ml		HITACHI
HIT0271F	TRIGLYCERIDES	GPO PAP	5x100ml		HITACHI
BXC0421A	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	3x10/1x10ml		LIQUID
BXC0421B	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	6x30/3x20ml		LIQUID
BXC0421C	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	4x70/2x50ml		LIQUID
BXC0421D	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	3x10/1x10ml	1x3ml	LIQUID
BXC0421E	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	6x30/3x20ml	1x3ml	LIQUID
BXC0421F	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	4x70/2x50ml	1x3ml	LIQUID
BXC0421G	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	4x125/2x85ml	1x3ml	LIQUID
HIT0421G	HDL CHOLESTEROL DIRECT	IMMUNOINHIBITION	6x20/2x20ml		HITACHI
BXC0431A	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	3x10/1x10ml		LIQUID
BXC0431B	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	6x30/3x20ml		LIQUID
BXC0431C	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	4x70/2x50ml		LIQUID
BXC0431D	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	3x10/1x10ml	1x3ml	LIQUID
BXC0431E	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	6x30/3x20ml	1x3ml	LIQUID
BXC0431F	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	4x70/2x50ml	1x3ml	LIQUID
HIT0431G	LDL CHOLESTEROL DIRECT	SELECTIVE PROTECTION	2x20/1x14ml		HITACHI

ORDERING INFORMATION

CAT NO	DESCRIPTION	METHODOLOGY	PACK SIZE	STD/CAL	TYPE
BXC0432A	LDL CHOLESTEROL	PRECIPITATION HEPARIN	2x60ml	1x5ml	LIQUID
BXC0130A	LIPOPROTEIN (a)	IMMUNOTURBIDIMETRY	2x12.5/1x2ml		LIQUID
BXC0411A	APOLIPOPROTEIN A1	IMMUNOTURBIDIMETRY	2x12.5/1x2ml	1x250µl	LIQUID
BXC0412A	APOLIPOPROTEIN B	IMMUNOTURBIDIMETRY	2x12.5/1x2ml	1x250µl	LIQUID
BXC0263A	TOTAL LIPID	SULPHOPHOSPHO VAN	2x100ml	1x10ml	LIQUID

CONTROLS & CALIBRATORS

CAT NO	DESCRIPTION	PACK SIZE	TYPE
BXC0315B	HDL / LDL CALIBRATOR	1x3ml	LYO
BXC0315C	HDL / LDL CALIBRATOR	5x3ml	LYO
BXC0317A	LIPID CALIBRATOR	3x1ml	LYO
BXC0330A	LIPID CONTROL NORMAL	3x1ml	LYO
BXC0316A	LIPID CONTROL ELEVATED	3x1ml	LYO
BXC0134A	LIPOPROTEIN (a) CALIBRATOR	1x1ml	LIQUID
BXC0131A	LIPOPROTEIN (a) CONTROL LOW	1x1ml	LIQUID
BXC0133A	LIPOPROTEIN (a) CONTROL HIGH	1x1ml	LIQUID



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