

Apolipoprotein E

Analyte: Apolipoprotein E

Specimen Type: Serum, EDTA Plasma

Optimum Volume: 0.5 mL

2-8°C

-20°C

-70°C

6 days

1 month

2.5 years

Reporting units: mg/dL

Method: Immunoturbidimetric

Biological or Clinical Significance:

Apolipoprotein E is a 299 amino acid, arginine – rich glycoprotein. The major source of synthesis and secretion is liver parenchymal cells, which secrete Apo E in association with VLDL particles. Apo E is also a protein component of several other classes of plasma lipoproteins, including chylomicrons, chylomicron remnants, IDL and HDL. Only a minute amount of Apo E is found in LDL.

Hyperlipidemia may be associated with defective or deficient Apo E. A major role of Apo E appears to be the clearance of Apo B-containing remnants. Apo E also appears to play an important role in HDL metabolism and reverse cholesterol transport, the process by which excess cholesterol is removed from peripheral tissues and transported to the liver. Apo E facilitates the expansion of the HDL core, enhancing its cholesterol carrying capacity. In addition Apo E can mediate hepatic removal and catabolism of cholesterol-ester-enriched HDL.

Principle of Test Method:

The Apo E assay is an automated immunoturbidimetric method.