HDL-Triglyceride

Analyte: HDL Triglyceride

Specimen Type: Serum, Inquire for additional option(s)

Optimum Volume: 0.5 mL

2-8°C	-20°C	-70°C
5 days	3 months	2 years

Reporting units: mg/dL

Method: Precipitation & Automated

Biological or Clinical Significance:

Glycerol concentrations in fresh, fasting serum are usually in the 1 mg/dL range (levels may go up in samples that are not promptly processed and analyzed, or if refrigerated for extended periods). Determination of triglyceride (TG) on a mass basis assumes that the molecular weight of triolein, 885 g/mol, represents the average triacylglycerol molecule in the circulation. Therefore, normal levels of glycerol translate into addition of 5 to10 mg of TG per deciliter of serum or plasma. In normolipidemic subjects, this difference is relatively insignificant, but at higher TG levels the effect is more substantial and should be accounted for. The levels of TG (and glycerol) are higher in patients with metabolic syndrome and diabetes, as well as a host of genetic conditions or in carriers of some alleles. In lipid loading studies and other studies investigating triglycerides in postprandial serum or plasma, TG levels are much higher than when fasting. For studies requiring evaluation of non-fasting TG levels, and because abnormal fasting triglyceride levels are the ones of clinical interest, it is best to measure all triglyceride samples using a system that corrects for endogenous glycerol (glycerol blanking). Furthermore, extended processing or storage time does not affect the glycerol-blanked triglyceride level. The NCEP Working Group on Lipoprotein Measurement has endorsed the recommendation that all laboratories offer a glycerol-blanked triglyceride analysis.

Principle of Test Method:

In this procedure, the HDL fraction is obtained via precipitation (see HDL-C precipitation by DS or PEG).Triglyceride is then measured on the HDL supernate by automated assay.