HDL Cholesterol

Synonyms	High Density Lipoprotein Cholesterol
Clinical Indication	Cholesterol circulates in blood bound to lipoproteins; the two main ones being low density lipoprotein (LDL) and high density lipoprotein (HDL). HDL concentrations are inversely correlated with risk of atherosclerosis, that is, high levels are beneficial. However, a causal relationship has not been established. Modest increases in total cholesterol may be due to increased HDL cholesterol so it is important that HDL is measured before any treatment is initiated. High-density lipoprotein (HDL) cholesterol should be measured (alongside the lipid profile): • to achieve the best estimate of CVD risk • before starting lipid modification therapy for the primary prevention of CVD • monitoring patients on high-intensity statin treatment
Part of Profile / See Also	Lipid profile
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	On request.
Turnaround Time	Same day
Patient Preparation	Reported as part of lipid profile
Sample Requirements	
Specimen Type	Serum and plasma
Volume	2 ml
Acceptable Containers	 Yellow top (SST) tube  Green top (lithium-heparin) tube  paediatric orange top (lithium-heparin)  paediatric green top (lithium-heparin) Plain serum samples may also be used.

Reference Range & Units	Ideally levels should be > 1.0 mmol/L
Interferences	Drugs such as beta blockers, benzodiazepines, and anabolic steroids may lower HDL cholesterol
Interpretation & Clinical Decision Value (if applicable)	Exercise, weight loss (in overweight subjects), smoking cessation, and substitution of monounsaturated for saturated fatty acids raise HDL cholesterol. There is no firm evidence of benefit from drug therapy to target low HDL cholesterol
References	NICE CG187 Cardiovascular disease: risk assessment and reduction, including lipid modification (2014). Beckman kit insert.
Test code	LIP/FLIP (Part of the lipid profile)
Lab Handling	Analysed from primary tube and stored at 4°C Serum and plasma stable for 7 days at 2-8°C