

## Lipoproteins, High Density (HDL), Human Plasma

**Cat #** LIPH16-N

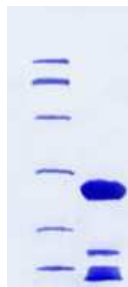
Lipoproteins, High Density (HDL), Human Plasma

**Size:** 1 mg

High-density lipoprotein (HDL) is one of the five major groups of lipoproteins, which, in order of sizes, largest to smallest, are chylomicrons, VLDL, IDL, LDL, and HDL, which enable lipids (fats), like cholesterol and triglycerides, to be transported within the water around cells, including the bloodstream. HDL is the smallest of the lipoprotein particles. They are the densest because they contain the highest proportion of protein to cholesterol. Their most abundant apolipoproteins are apo A-I and apo A-II. The liver synthesizes these lipoproteins as complexes of apolipoproteins and phospholipid, which resemble cholesterol-free flattened spherical lipoprotein particles. Five subfractions of HDL have been identified. From largest (and most effective at cholesterol removal) to smallest (and least effective), the types are 2a, 2b, 3a, 3b, and 3c.

HDL transports cholesterol mostly to the liver or steroidogenic organs such as adrenals, ovary, and testes by direct and indirect pathways. HDL is removed by HDL receptors such as scavenger receptor BI (SR-BI), which mediate the selective uptake of cholesterol from HDL. In humans, probably the most relevant pathway is the indirect one, which is mediated by cholesteryl ester transfer protein (CETP). This protein exchanges triglycerides of VLDL against cholesteryl esters of HDL. As the result, VLDLs are processed to LDL, which are removed from the circulation by the LDL receptor pathway. The triglycerides are not stable in HDL, but degraded by hepatic lipase so that finally small HDL particles are left, which restart the uptake of cholesterol from cells.

### Source and Form:



**Cat #** LIPH16-N, Purified Native Human High Density Lipoproteins (HDL) prepared from fresh, non-frozen plasma shown to be non reactive for HbsAG, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests. Purified protein (mol wt 175-360 kda) displayed single arc by IEP against antisera to whole human serum. single arc by IEP against antisera to whole human serum. Essentially free of other plasma lipoproteins and chylomicrons as determined by electrophoresis using a SPIFE Vis Cholesterol gel kit for lipids and Coomassie Blue for proteins. >=95% of total lipoprotein content by electrophoresis.

It is supplied in PBS, pH 7.5 and 0.001% EDTA. A suitable anti-bacteriostatic agent can be added if required (0.1% azide or 0.02% thimerosal). **Store at 2-4°C and do not freeze.**

### Suggested Applications:

Antigen in ELISA and Western blots

**References:** Segrest JP (2001) J. Lipid Res. 42, 1346-1347; Sniderman AD (2003) Clin. Biochem. 36, 499-504; Knott C (1986) Nucl. Acid. Res. 14, 7501-7503; Chen SH (1986) JBC 261, 12918-12922; Law SW (1985) PNAS 82, 8340-8344;

All items are for in vitro research use only.

### Related items

Catalog#	ProdDescription
Rabbit-Poly	APOA11-S Anti-Human Plasma
Apolipoprotein A-I protein antiserum	
Rabbit-Poly	APOA12-A Anti-Human
Apolipoprotein A-I protein IgG, aff pure	
Rabbit-Poly	APOA13-A Anti-Mouse
Apolipoprotein A-I protein IgG, aff pure	
APOA15-N-100	Apolipoprotein A-I, Human Plasma, HDL
Goat-PolyAPOA21-A	Anti-Human Apolipoprotein A-II protein IgG, aff pure
APOA25-N-100	Apolipoprotein A-II, Human Plasma, HDL
APOA45-N-100	Apolipoprotein A-IV, Human Plasma, HDL
Goat-PolyAPOB21-A	Anti-Human Apolipoprotein B IgG,
APOB21-C	Human Apolipoprotein B protein control for WB
APOB25-N-100	Apolipoprotein B, Human Plasma, LDL
Rabbit-Poly	APOC11-A Anti-Human
Apolipoprotein C-I IgG, aff pure	
APOC15-N-100	Human Apolipoprotein C-I protein control for WB
APOC15-N-100	Apolipoprotein C-I, Human Plasma, VLDL
Rabbit-Poly	APOC21-S Anti-Human Plasma
Apolipoprotein C-II antiserum	
Rabbit-Poly	APOC22-A Anti-Human
Apolipoprotein C-II IgG, aff pure	
APOC25-N-50	Apolipoprotein C-II, Human Plasma, VLDL
Rabbit-Poly	APOC32-A Anti-Human
Apolipoprotein C-III IgG, aff pure	
APOC35-N-50	Apolipoprotein C-III, Human Plasma, VLDL
Goat-PolyAPOE11-S	Anti-Human ApoE protein antiserum #1
Mouse-Mono	APOE12-M Monoclonal Anti-Human ApoE protein IgG #2
Rabbit-Poly	APOE13-A Anti-Human Plasma
Apolipoprotein E (ApoE) IgG, aff pure	
APOE15-R	Human Purified native plasma Apolipoprotein E protein
APOE25-R	Recombinant Purified Human Apolipoprotein E2 protein
Rabbit-Poly	APOE31-S Anti-Human
ApoE3APOE35-R	Recombinant Purified Human Apolipoprotein E3 protein
APOE36-R	Recombinant (E coli) Purified
LIPH16-N	130612A

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