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Product Information

Lipoprotein, Low Density
from human plasma

Catalog Number **L8292**
Storage Temperature 2–8 °C

Synonyms: LDL, β-lipoprotein

Product Description
Low density lipoprotein, LDL, constitutes 50% of the total lipoprotein mass in plasma and is the major carrier of cholesterol and cholesteryl esters. LDL levels strongly correlate with coronary heart disease. In a normal fasting individual, LDL concentrations range from 2.0–3.5 g/L.

Low density lipoprotein is a large protein (3,500 kDa) with a diameter of 25.8 nm.[1] LDL is composed of 20–25% protein and 75–80% lipid. The lipid portion can be further described as the following:[2-4]

9% free cholesterol
42% cholesteryl ester
20–24% phospholipid
5% triglyceride

The LDL product is lyophilized from a solution of 0.15 M NaCl and 0.01% EDTA, pH 7.4.

Purity: ≥95% (SDS PAGE)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Low density lipoprotein is prepared from fresh human plasma, shown to be non-reactive for infectious agents by FDA approved tests.

Preparation Instructions
The product is supplied as a lyophilized powder. Upon addition of deionized water, this product will form a mixture containing insoluble, denatured material. The product will not form a clear solution in water.
Notes: Gentle rotation overnight is recommended to maximize recovery of the product. Vortexing is not recommended, as this will cause the mixture to foam. Likewise, filtration of the mixture is not recommended, as this will result in loss of protein material.

When 1 ml of deionized water is added to the lyophilized product, the resulting mixture will contain ~150 mM NaCl and 0.01% EDTA, pH 7.4.

Storage/Stability
The product ships on wet ice and all solutions of lipoproteins should be stored at 2–8 °C. Freezing may cause structural or compositional changes.

References
1. Margolis, S., J. Lipid Res., **8**, 501 (1967).
2. Fellin, R.B. *et al*., Clin. Chim. Acta, **54**, 325 (1975).
3. Rudel, L.L. *et al*., Biochem. J., **139**, 89 (1974).
4. Shui, S.P. *et al*., Clin. Chim. Acta, **203**, 109 (1991).

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