

Native Pseudomonas sp. Lipoprotein lipase

Product Information

Cat#	DIA-210
Similar	LPL
Source	Pseudomonas sp.
Description	Lipoprotein lipase (LPL) (EC 3.1.1.34) is a member of the lipase gene family, which includes pancreatic lipase, hepatic lipase, and endothelial lipase. It is a water soluble enzyme that hydrolyzes triglycerides in lipoproteins, such as those found in chylomicrons and very low-density lipoproteins (VLDL), into two free fatty acids and one monoacylglycerol molecule. It is also involved in promoting the cellular uptake of chylomicron remnants, cholesterol-rich lipoproteins, and free fatty acids. LPL requires ApoC-II as a cofactor.
Activity	Gradelll 20U/mg-solid or more (containing approx. 80% of stabilizers)
CAS No.	9004-02-8
Isoelectric point	5.95±0.05
Synonyms	Lipoprotein lipase; LPL; EC 3.1.1.34; Clearing factor lipase; Diacylglycerol lipase; Diglyceride lipase
Enzyme Commission Number	EC 3.1.1.34
pH Stability	pH 7.0-9.0 (25°C, 20hr)
Optimum pH	7.0-9.0
Optimum temperature	45-50°C
Thermal stability	below 55°C (pH 7.0, 10min)
Stability	Stable at -20°C for at least one year
Stabilizers	Mg??, Na-cholate, bovine serum albumin

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Inhibitors	Hg ⁺⁺ , Ag ⁺ , ionic detergents
Contaminants	Phosphatase < 1.0×10 ⁻³ % Catalase < 2.0×10 ⁻² % NADH oxidase< 1.0×10 ⁻³ % Cholesterol oxidase < 2.0×10 ⁻³ %
Abbr	LPL (Pseudomonas sp.)
Alias	LPL
Applications	This enzyme is useful for enzymatic determination of triglyceride in serum when coupled with L-α-glycerophosphate oxidase and glycerol kinase. Usually, the reaction can be completed in 5 minutes at 37°C by using 2.5~3.0 units of the enzyme per test (3.0ml) at pH around 7.0.
Appearance	Light brown amorphous powder, lyophilized
Molecular Weight	approx. 134 kDa