

## Recombinant Human Carboxylesterase 1/CES1 Protein(C-6His)

## Cat.NO.: TP05519

**3th Edition** 

**Synonyms:**Liver Carboxylesterase 1; Acyl-Coenzyme A:Cholesterol Acyltransferase; ACAT; Brain Carboxylesterase hBr1; Carboxylesterase 1; CE-1; hCE-1; Cocaine Carboxylesterase; Egasyn; HMSE; Methylumbelliferyl-Acetate Deacetylase 1; Monocyte/Macrophage Serine Esterase; Retinyl Ester Hydrolase; REH; Serine Esterase 1; Triacylglycerol Hydrolase; TGH; CES1; CES2; SES1

**Description**:Carboxylesterase 1 (CES1) is a member of a large family of carboxylesterases that are responsible for the hydrolysis of ester and amide bonds. These enzymes have broad substrate specificity ranging from small molecule esters such as phenylester to long chain fatty acid esters and thioesters. They are major determinants of the pharmacokinetic behavior of most therapeutic agents containing an ester or amide bond. CES1 shares the serine hydrolase fold observed in other esterases. CES1 hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester. CES1 participates in detoxification of drugs such as cocaine and heroin in serum and liver. It may also play a role in detoxification in the lung and/or protection of the central nervous system from ester or amide compounds.

Form:PBS

Molecular Weight:61.1 kDa

Sequences:His19-Glu562

Purity:> 95% by HPLC

## **Concentration:**

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.