Recombinant Protein Technical Manual

Recombinant Human Carboxylesterase 1/CES1 Protein (His Tag)

RPES4375

Product Data:

Product SKU: RPES4375

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P23141-3

Protein Information:

Molecular Mass: 61.1 kDa

AP Molecular Mass: 60 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM HAc-NaAc, 150mM NaCl, pH 4.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Liver Carboxylesterase 1; Acyl-Coenzyme A:Cholesterol Acyltransferase; ACAT; Brain Carboxylesterase hBr1; Carboxylesterase 1; CE; hCE; 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

Immunogen Information:

Sequence: His19-Glu562

Background:

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.