

Recombinant Human Carboxylesterase 1/CES1 Protein (His Tag)

Catalog Number: PKSH032167

Note: Centrifuge before opening to ensure complete recovery of vial contents.

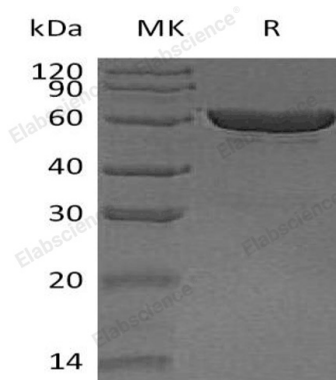
Description

Species	Human
Source	HEK293 Cells-derived Human Carboxylesterase 1;CES1 protein His 19-Glu562, with an C-terminal His
Calculated MW	61.1 kDa
Observed MW	60 kDa
Accession	P23141-3
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein 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.

Data



> 95 % as determined by reducing SDS-PAGE.

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.