Recombinant human Carboxylesterase 1/CES1 protein

Catalog Number: ATGP3862

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
19-568aa

UniProt No.
P23141

NCBI Accession No.
NP_001020366

Alternative Names
Liver carboxylesterase 1 isoform a, CES1, ACAT, CE-1, CEH, CES2, hCE-1, HMSE, HMSE1, PCE-1, REH, SES1, TGH

PRODUCT SPECIFICATION

Molecular Weight
61.7 kDa (559aa)

Concentration
0.5mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. 25mM Sodium Acetate (pH 4.0) containing 10% glycerol, 0.1M NaCl, 0.1mM PMSF

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 700pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1pmole of p-nitrophenyl acetate to pnitrophenol per minute at pH 7.5 at 37C.

Tag
His-Tag

Application
Enzyme Activity,SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human Carboxylesterase 1/CES1 protein

Catalog Number: ATGP3862

Description

Carboxylesterase 1, also known as liver carboxylesterase 1 isoform a, is a member of a large family of carboxylesterases. It is also part of the alpha/beta fold hydrolase family. Carboxylesterases hydrolyze long-chain fatty acid esters and thioesters. The resulting carboxylates are then often conjugated by other enzymes to increase solubility and eventually excreted. Also, this enzyme may play a role in detoxification in the lung and/or protection of the central nervous system from ester or amide compounds. This protein is known to react aromatic and aliphatic esters and can manage cellular cholesterol esterification levels. It is present in most tissues with higher levels in the liver and low levels in the gastrointestinal tract. Recombinant human Carboxylesterase 1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

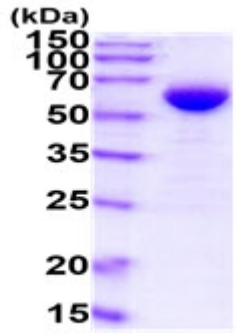
ADLGHPSSPP VVDTVHGKVL GKFVSLEGFA QPVAIFLGIP FAKPPLGPLR FTPPQPAEPW SFVKNATSYP PMCTQDPKAG QLLSELFTNR KENIPLKLSE DCLYLNIYTP ADLTKKNRLP VMVWIHGGGL MVGAASTYDG LALAAHENVV VVTIQYRLGI WGFFSTGDEH SRGNWGHLDQ VAALRWVQDN IASFGGNPGS VTIFGESAGG ESVSVLVLSP LAKNLFHRAI SESGVALTSV LVKKGDVKPL AEQIAITAGC KTTTSAVMVH CLRQKTEEEL LETTLKMKFL SLDLQGDPRE SQPLLGTVID GMLLLKTPEE LQAERNFHTV PYMVGINKQE FGWLIPMQLM SYPLSEGQLD QKTAMSLLWK SYPLVCIAKE LIPEATEKYL GGTDDTVKKK DLFLDLIADV MFGVPSVIVA RNHRDAGAPT YMYEFQYRPS FSSDMKPKTV IGDHGDELFS VFGAPFLKEG ASEEEIRLSK MVMKFWANFA RNGNPNGEGL PHWPEYNQKE GYLQIGANTQ AAQKLKDKEV AFWTNLFAKK AVEKPPQTEH IELHHHHHH

General References

Satoh T., et al, (2006) Chem Biol Interact. 162:195-211.
Redinbo MR., et al. (2005) Drug Discovery Today 10:313.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.