

# Recombinant mouse Carboxylesterase 1/CES1 protein

Catalog Number: ATGP3865

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

19-565aa

### UniProt No.

Q8VCC2

### NCBI Accession No.

NP\_067431

### Alternative Names

Liver carboxylesterase 1, Carboxylesterase 1/CES1, CES1G, Ces-1, Ces1, Ses-1, Acyl-coenzyme A:cholesterol acyltransferase, Carboxylesterase 1G, ES-x, ATGP3329

## PRODUCT SPECIFICATION

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### Molecular Weight

61.9 kDa (556aa)

### Concentration

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

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

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

### Biological Activity

Specific activity is > 2,000pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1pmole of p-nitrophenyl acetate to p-nitrophenol per minute at pH 7.5 at 37C

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### 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.

# Recombinant mouse Carboxylesterase 1/CES1 protein

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## BACKGROUND

### Description

Carboxylesterase 1/CES1, also known as liver carboxylesterase 1, is a member of a large family of carboxylesterases that are responsible for the hydrolysis of ester and amide bonds. CES1G shares the serine hydrolase fold observed in other esterases. It is a rat and mouse specific protein that is expressed predominantly in liver, but also in kidney and lung. Recombinant mouse Carboxylesterase 1/CES1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques. This product has replaced ATGP3329.

### Amino acid Sequence

```
<ADP>HPSLPPV VHTVHGKVLG KYVTLEGFSQ PVAVFLGVFP AKPPLGSLRF APPEPAEPWS FVKHTTSYPP LCYQNPEAAL  
RLAELFTNQR KIIPHKFSED CLYLNIYTPA DLTQNSRLPV MVWIHGGGLV IDGASTYDGV PLAVHENVVV VVIQYRLGIW  
GFFSTEDEHS RGNWGHLDQV AALHWVQDNI ANFGGNPGSV TIFGESAGGE SVSVLVLSPL AKNLFHRAIA QSSVIFNPCL  
FGRAARPLAK KIAALAGCKT TTAAMVHCL RQKTEDELLE VSLKMKFGTV DFLGDPRESY PFLPTVIDGV LLPKAPEEIL  
AEKSFNTVPY MVGINKHEFG WIIPMFLDFP LSERKLDQKT AASILWQAYP ILNISEKLIP AAIEKYLGGT EDPATMTDLF  
LDLIGDIMFG VPSVIVSRSH RDAGAPTYMY EYQYRPSFVS DDRPQELLGD HADELFSVWG APFLKEGASE EEINLSKMVM  
KFWANFARNG NPNGEGLPHW PEYDQKEGYL QIGVPAQAAH RLKDKEVDFW TELRAKETAE RSSHREHVEL <HHHHHH>
```

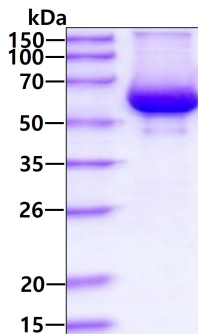
### General References

Satoh T., et al. (2006) Chem Biol Interact. 162:195-211.

Fleming CD., et al. (2007) Biochemistry. 46:5063-5071.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.