

# Recombinant mouse Carboxylesterase 3/CES3 protein

Catalog Number: ATGP3467

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

19-565aa

### UniProt No.

Q8VCT4

### NCBI Accession No.

NP\_444430

### Alternative Names

Carboxylesterase 1D, Ces1d, Ces3, TGH

## PRODUCT SPECIFICATION

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### Molecular Weight

60.9 kDa (555aa)

### 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 > 80,000pmol/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.

## BACKGROUND

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# Recombinant mouse Carboxylesterase 3/CES3 protein

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## Description

Ces1d, also known as carboxylesterase 1D, is a member of a large family of carboxylesterases that are responsible for the hydrolysis of ester and amide bonds. It is the principle lipase of white adipose tissue fat cake extracts. Partially purified white adipose tissue Ces1d had lipase activity as well as lesser but detectable neutral cholesteryl ester hydrolase activity. The protein shows low catalytic efficiency for hydrolysis of CPT-11, a prodrugs for camptothecin used in cancer therapeutics. Recombinant mouse Ces1d, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

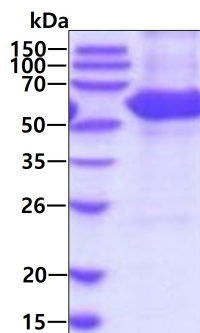
YPSSPPVVNT VKGKVLGKYV NLEGFTQPVA VFLGVVFAKP PLGSLRFAPP QPAEPWSFVK NTTSYPPMCS QDAVGGQVLS  
 ELFTNRKENI PLQFSEDCLY LNIYTPADLT KNSRLPVMVW IHGGGLVVG ASTYDGLALS AHENVVVVTI QYRLGIWGFF  
 STGDEHSRGN WGHLQVAAL RWVQDNIANF GGNGPSVTIF GESAGGFSVS VLVLSPAKN LFHRAISEG VSLTAALITT  
 DVKPIAGLVA TSLGCKTTTS AVMVHCLRQK TEDELLETSL KLNLFKLDLL GNPKESYPFL PTVIDGVVLP KAPEEILAEK  
 SFSTVPYIVG INKQEFGWII PTLMGYPLAE GKLDQKTANS LLWKSYPYTLK ISENMIPVVA EKYLGGTDDL TKKKDLFQDL  
 MADVVFVGVPS VIVSRSHRDA GASTYMYEFE YRPSFVSAMR PKAVIGDHGD EIFSVFGSPF LKDGASEEET NLSKMVMKFW  
 ANFARNGNPN GGGLPHWPEY DQKEGYLKIG ASTQAAQRLK DKEVSFWAEL RAKESAQRPS HREHVEL<LEH HHHHH>

## General References

Soni KG., et al. (2004) J. Biol. Chem. 279:40683-40689.  
 Sanghani SP., et al. (2004) Drug Metab Dispos. 32:505-511.

## DATA

### SDS-PAGE



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