Recombinant mouse Carboxylesterase 3/CES3 protein

Catalog Number: ATGP3467

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
19-565aa

UniProt No.
Q8VCT4

NCBI Accession No.
NP_444430

Alternative Names
Carboxylesterase 1D, Ces1d, Ces3, TGH

PRODUCT SPECIFICATION

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

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

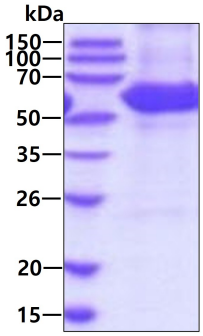
YPSSPPVVNT VKGKVLGKYV NLEGFTQPVA VFLGVPFAKP PLGSLRFAPP QPAEPWSFVK NTTSYPPMCS QDAVGGQVLS ELFTNRKENI PLQFSEDCLY LNIYTPADLT KNSRLPVMVW IHGGGLVVGG ASTYDGLALS AHENVVVVTI QYRLGIWGFF STGDEHSRGN WGHLDQVAAL RWVQDNIANF GGNPGSVTIF GESAGGFSVS VLVLSPLAKN LFHRAISESG VSLTAALITT DVKPIAGLVA TLSGCKTTTS AVMVHCLRQK TEDELLETSL KLNLFKLDLL GNPKESYPFL PTVIDGVVLP KAPEEILAEK SFSTVPYIVG INKQEFGWII PTLMGYPLAE GKLDQKTANS LLWKSYPTLK ISENMIPVVA EKYLGGTDDL TKKKDLFQDL MADVVFGVPS 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.