

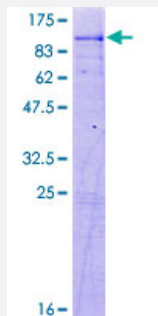
Full-Length

ACSL4 (Human) Recombinant Protein (P01)

Catalog # H00002182-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ACSL4 full-length ORF (NP_004449.1, 1 a.a. - 670 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAKRIKAKPTSDKPGSPYRSVTHFDSLAVIDIPGADTLDKLFDHAVSKFGKKDSLGTREILSEENE
MQPNGKVFKKLILGNYKWMNYLEVNRVNNFGSGLTALGLKPKNTAIFCETRAEWMIAAQTCFKY
NFPLVTLTYATLGKEAVVHGLNESEASYLITSVELLESKLKTALLDISCVKHIIYVDNKAINKAEYPEGF
EIHSMQSVEELGSNPENLGIPPSRPTPSDMAVMYTSGSTGRPKGVMHHSNLIAGMTGQCERIP
GLGPKDITYIGYPLAHVLELTAEISCFTYGCRIGYSSPLTSDQSSKIKKGSKGDCITVLKPTLMAAV
PEIMDRIYKNVMSKVQEMNYQKTLFKIGYDYKLEQIKKGYDAPLCNLLL FKKVKALLGGNVRMMLS
GGAPLSPQTHRFMNVCFCPIGQGYGLTESCGAGTVTEVTDYTTGRVGAPLICCEIKLKDWEQEGG
YTINDKPNPRGENIGGQNI SMGYFKNEEKTAEDYSVDENGQRWFCTGDIGEFHPDGCLQIIDRKKD
LVKLQAGEYVSLGKVEAALKNCPLIDNICAFKSDQSYVISFVVPNQKRLTLLAQKQKVEGTWVDI
CNNPAMEAEILKEIREAANAMKLERFEIPIKVRLSPEPWTPETGLVTD AFKLKRKELRNHYLKDIER
MYGKK

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

100.8

Interspecies Antigen Sequence

Mouse (97); Rat (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ACSL4

Entrez GeneID	2182
GeneBank Accession#	NM_004458.1
Protein Accession#	NP_004449.1
Gene Name	ACSL4
Gene Alias	ACS4, FACL4, LACS4, MRX63, MRX68
Gene Description	acyl-CoA synthetase long-chain family member 4
Omim ID	300157 300387
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the mental retardation or Alport syndrome. Alternative splicing of this gene generates 2 transcript variants. [provided by RefSeq]

Other Designations

OTTHUMP00000023846|acyl-CoA synthetase 4|fatty-acid-Coenzyme A ligase, long-chain 4|lignoceroyl-CoA synthase|long-chain fatty-acid-Coenzyme A ligase 4

Publication Reference

- [Inhibition of CARM1-Mediated Methylation of ACSL4 Promotes Ferroptosis in Colorectal Cancer.](#)

Shengjie Feng, Zejun Rao, Jiakun Zhang, Xiaowei She, Yaqi Chen, Kairui Wan, Haijie Li, Chongchong Zhao, Yongdong Feng, Guihua Wang, Junbo Hu, Xuelai Luo.

Advanced Science (Weinheim, Baden-Württemberg, Germany) 2023 Dec; 10(36):e2303484.

Application: Pull-Down, N/A, Recombinant proteins

- [A Novel TIP30 Protein Complex Regulates EGF Receptor Signaling and Endocytic Degradation.](#)

Zhang C, Li A, Zhang X, Xiao H.

The Journal of Biological Chemistry 2011 Mar; 286(11):9373.

Application: PI, WB-Re, Recombinant protein

Pathway

- [Adipocytokine signaling pathway](#)
- [Fatty acid metabolism](#)
- [Metabolic pathways](#)
- [PPAR signaling pathway](#)

Disease

- [Depressive Disorder](#)
- [Erythema](#)
- [Mental Retardation](#)
- [Metabolic Syndrome X](#)
- [Schizophrenia](#)