

Datasheet for ABIN7563872

SLC27A1 Protein (AA 1-646) (His tag)



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3 Images

Overview

Quantity:	1 mg
Target:	SLC27A1 (FATP1)
Protein Characteristics:	AA 1-646
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC27A1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Slc27a1 Protein expressed in mammalian cells.
Sequence:	<p>MRAPGAGTAS VASLALLWFL GLPWTWSAAA AFCVYVGGGG WRFLRIVCKT ARRDLFGLSV</p> <p>LIRVRLELRR HRRAGDTIPC IFQAVARRQP ERLALVDASS GICWTFAQLD TYSNAVANLF</p> <p>RQLGFAPGDV VAVFLEGRPE FVGLWLGLAK AGVVAALLNV NLRREPLAFC LGTSAAKALI</p> <p>YGGEMAAAVA EVSEQLGKSL LKFCSGDLGP ESILPDTQLL DPMLAEAPTT PLAQAPGKGM</p> <p>DDRLFYIYTS GTTGLPKAAI VVHSRYRIA AFGHHSYSMR AADVLYDCLP LYHSAGNIMG</p> <p>VGQCVIYGLT VVLRKKFSAS RFWDDCVKYN CTVVQYIGEI CRYLLRQPVR DVEQRHRVRL</p> <p>AVGNGLRPAI WEEFTQRFGV PQIGEFYGAT ECNCSIANMD GKVGS CGFNS RILTHVPIR</p> <p>LVKVNEDTME PLRDSEGLCI PCQPGEPLL VGQINQQDPL RRFDDGYVSDS ATNKKIAHSV</p> <p>FRKGDSAYLS GDVLVMDDELG YMYFRDRSGD TFRWRGENVS TTEVEAVLSR LLGQTDVAVY</p> <p>GVAVPGVEGK AGMAAIADPH SQLDPNSMYQ ELQKVLASYA RPIFLRLLPQ VDTTGTFKIQ</p> <p>KTRLQREGFD PRQTS DRLFF LDLKQGRYVP LDERVHARIC AGDFSL Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different</p>

complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none">• Made to order protein - from design to production - by highly experienced protein experts.• Protein expressed in mammalian cells and purified in one-step affinity chromatography• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.</p>
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	SLC27A1 (FATP1)
Alternative Name:	Slc27a1 (FATP1 Products)
Background:	<p>Long-chain fatty acid transport protein 1 (Arachidonate--CoA ligase) (EC 6.2.1.15) (Fatty acid transport protein) (Fatty acid transport protein 1) (FATP-1) (Long-chain-fatty-acid--CoA ligase) (EC 6.2.1.3) (Solute carrier family 27 member 1) (Vlc27a1) (Very long-chain acyl-CoA synthetase) (EC 6.2.1.-),FUNCTION: Mediates the import of long-chain fatty acids (LCFA) into the cell by facilitating their transport at the plasma membrane (PubMed:7954810, PubMed:9786857, PubMed:9671728, PubMed:10471110, PubMed:12235169, PubMed:11970897, PubMed:15699031, PubMed:28178239, PubMed:24858472, PubMed:19527715) (Probable). Also functions as an acyl-CoA ligase catalyzing the ATP-dependent formation of fatty acyl-CoA using LCFA and very-long-chain fatty acids (VLCFA) as</p>

Target Details

substrates, which prevents fatty acid efflux from cells and might drive more fatty acid uptake (PubMed:10593920, PubMed:12235169, PubMed:12937175). May act directly as a bona fide transporter, or alternatively, in a cytoplasmic or membrane-associated multimeric protein complex to trap and draw fatty acids towards accumulation (PubMed:14991074, PubMed:15897321). Plays a pivotal role in regulating available LCFA substrates from exogenous sources in tissues undergoing high levels of beta-oxidation or triglyceride synthesis (PubMed:12235169). May be involved in regulation of cholesterol metabolism (PubMed:12235169). Probably involved in fatty acid transport across the blood barrier (By similarity). {ECO:0000250|UniProtKB:Q6PCB7, ECO:0000269|PubMed:10471110, ECO:0000269|PubMed:10593920, ECO:0000269|PubMed:11970897, ECO:0000269|PubMed:12235169, ECO:0000269|PubMed:12937175, ECO:0000269|PubMed:14991074, ECO:0000269|PubMed:15699031, ECO:0000269|PubMed:15897321, ECO:0000269|PubMed:19527715, ECO:0000269|PubMed:24858472, ECO:0000269|PubMed:28178239, ECO:0000269|PubMed:7954810, ECO:0000269|PubMed:9671728, ECO:0000269|PubMed:9786857, ECO:0000305|PubMed:12556534}.

Molecular Weight: 71.3 kDa

UniProt: [Q60714](#)

Pathways: [Inositol Metabolic Process](#), [Regulation of Lipid Metabolism by PPARalpha](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

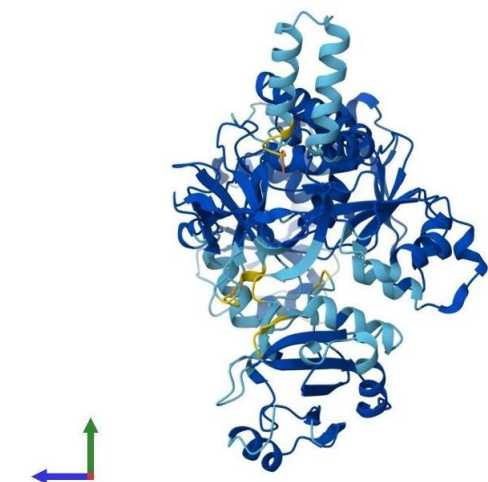
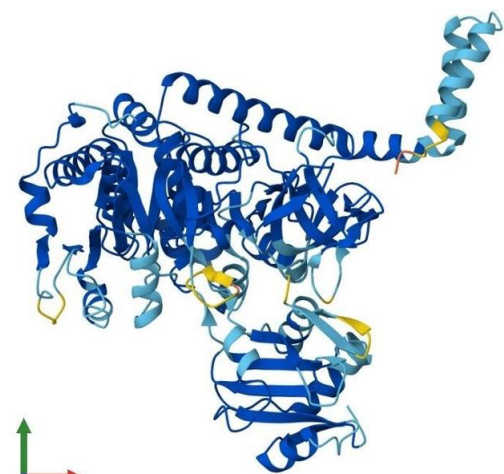
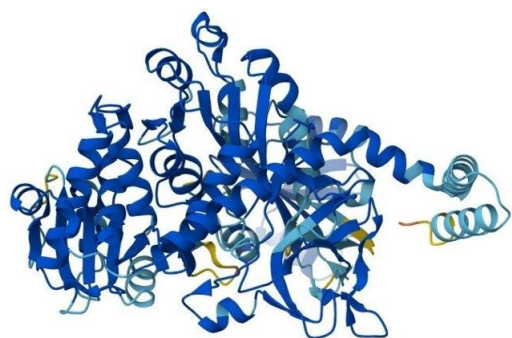
Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months



Protein Structure

Image 1. AlphaFold protein structure prediction of Mouse Recombinant Slc27a1 Protein, UniprotID Q60714

Protein Structure

Image 2. AlphaFold protein structure prediction of Mouse Recombinant Slc27a1 Protein, UniprotID Q60714

Protein Structure

Image 3. AlphaFold protein structure prediction of Mouse Recombinant Slc27a1 Protein, UniprotID Q60714