

Product datasheet for **RG228962**

FATP2 (SLC27A2) (NM_001159629) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FATP2 (SLC27A2) (NM_001159629) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC27A2
Synonyms:	ACSVL1; FACVL1; FATP2; hFACVL1; HsT17226; VLACS; VLCS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG228962 representing NM_001159629
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTTTCCGCCATCTACACAGTCTGGCGGGACTGCTGTTCTGCCGCTCTGGTGAACCTCTGCTGCC
 CATACTTCTTCCAGGACATAGGCTACTTCTGAAGGTGGCCGCCGTGGGCCGGAGGGTGCAGCTACGG
 GAAGCGCGCGCCGGCGCCACCATCCTGCGGGCGTTCTGGAGAAAGCGGCCAGACGCCACACAAGCCT
 TTTCTGCTCTTCCGCGACGAGACTCTCACCTACGCGCAGGTGGACCGCGCAGCAATCAAGTGGCCCGGG
 CGCTGCACGACCCTCGCCTGCGCCAGGAGACTGCGTGGCGCTCCTTATGGGTAACGAGCCGGCCTA
 CGTGTGGCTGTGGCTGGGCTGGTGAAGCTGGGCTGTGCCATGGCGTGCCTCAATTACAACATCCGCGCG
 AAGTCCCTGCTGCACTGCTTCCAGTGTGCGGGCGAAGGTGCTGCTGGTGTGCCAGAACTACAAGCAG
 CTGTGCAAGAGATACTGCCAAGCCTTAAAAAGATGATGTGCCATCTATTATGTGAGCAGAACTCTAA
 CACAGATGGGATTGACTCTTTCCACTCCTGCCTTATACATTTATACTTCTGGAACCACAGGTGCTACTCTTG
 CTTGCGGACTAAATTTTCAGCCAGCCAGTTTTGGGATGACTGCAGAAAAACAACGTCCTGTCATTCA
 GTATATCGGTGAAGTCTTCCGTTATTTATGCAACTCACCACAGAAACCAATGACCGTGATCATAAAGTG
 AGACTGGCACTGGGAAATGGCTTACGAGGAGATGTGTGGAGACAAATTTGTCAAGAGATTTGGGGACAT
 GCATCTATGAGTTCTATGCTGCCACTGAAGGCAATATTGGATTTATGAATTATGCGAGAAAAAGTTGGTGC
 TGTTGGAAGAGTAACTACCTACAGAAAAAATCATAACTTATGACCTGATTAATATGATGTGGAGAAA
 GATGAACCTGTCCGTGATGAAAAATGGATATTGCGTCAGAGTCCCAAAGGTGAAGTTGACTTCTGGTTT
 GCAAAAATCACACAACCTTACCCATTTAATGGCTATGCTGGAGCAAAGGCTCAGACAGAGAAAAAAT
 GAGAGATGTCTTTAAGAAAGGAGACCTCTATTTCAACAGTGGAGATCTCTTAATGGTTGACCATGAAAAAT
 TTCATCTATTTCCACGACAGAGTTGGAGATACATTCCGGTGGAAAGGGGAAAAATGTGGCCACCCTGAAG
 TTGCTGATACAGTTGGACTGGTTGATTTGTCCAAGAAGTAAATGTTTATGGAGTGCATGTGCCAGATCA
 TGAGGGTGCATTGGCATGGCCTCCATCAAAATGAAAGAAAACCATGAATTTGATGGAAAGAACTCTTT
 CAGCACATTGCTGATTACCTACCTAGTTATGCAAGGCCCGTTTCTAAGAATACAGGACACCATTGAGA
 TCACTGGAACCTTTAAACACCGCAAAATGACCCTGGTGGAGGAGGGCTTAAACCTGCTGTCATCAAGA
 TGCCTTGATTTCTGGATGACACAGCAAAATGTATGTGCCTATGACTGAGGACATCTATAATGCCATA
 AGTGCTAAAACCTGAAACTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG228962 representing NM_001159629
 Red=Cloning site Green=Tags(s)

MLSAIYTVLAGLLFLLPLLVNLCCPYFFQDIGYFLKVAAVGRRVRSYGRKRRPARTILRAFLEKARQTPHKP
 FLLFRDELTLYAQVDRRSNQVARALHDHLGLRQGDVALLMGNPAYVWLWGLVKLGCAMACLNYNIRA
 KSL LHCFQCCGAKVLLVSPQLAAVEEILPSLKKDDVSIYYVSRSTNTDGDIDKVDVSTEPIPESW
 RSEVTFSTPALYIYTSGTTGATLALRTKFSASQFWDDCRKYNVTVIQYIGELRLYLNSPQKPNDRDHKV
 RLALGNLGRGDVWRQFVKRFGDICIYEFYAATEGNIGFMNYARKVGVAVGRVNYLQKKIITYDLIKYDVEK
 DEPVRDENGVCVRVPKGEVGLLVCKITQLTPFNQYAGAKAQTEKKLRDVFKKGDLYFNSGDLMLMDHEN
 FIYFHDRVGDTRFKGENVATTEVADTVGLVDFVQEVNYYGVHVPDHEGRIGMASIKMKENHEFDGKFLF
 QHIADYLPYARPRFLRIQDTIEITGTFKHKMTLVEEGFNPAVIKDALYFLDDTAKMYVPMTEDIYNAI
 SAKTLKL

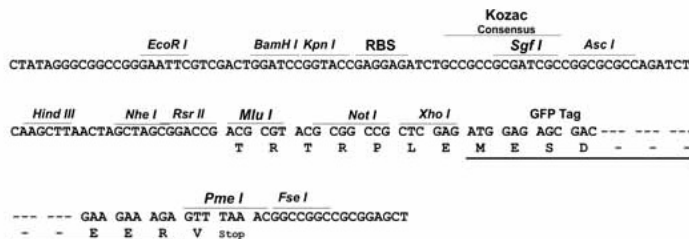
TRTRPLE - GFP Tag - V

Restriction Sites:

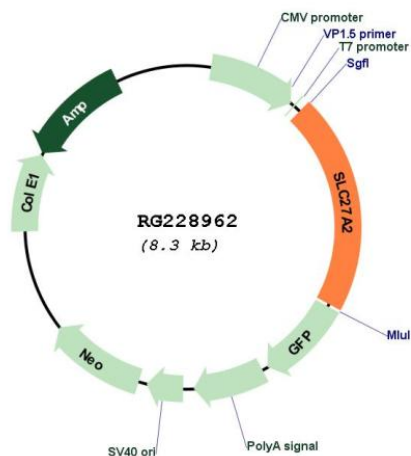
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001159629

ORF Size: 1701 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001159629.1 , NP_001153101.1
RefSeq Size:	2249 bp
RefSeq ORF:	1704 bp
Locus ID:	11001
UniProt ID:	O14975
Cytogenetics:	15q21.2
Protein Families:	Transmembrane
Protein Pathways:	PPAR signaling pathway
Gene Summary:	The protein encoded by this gene is an isozyme of 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 activates long-chain, branched-chain and very-long-chain fatty acids containing 22 or more carbons to their CoA derivatives. It is expressed primarily in liver and kidney, and is present in both endoplasmic reticulum and peroxisomes, but not in mitochondria. Its decreased peroxisomal enzyme activity is in part responsible for the biochemical pathology in X-linked adrenoleukodystrophy. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2009]