

Rabbit anti-Human ACSL4 (FACL4) Polyclonal Antibody | anti-ACSL4 antibody

ACSL4 (FACL4) Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284670	Rabbit	Human	Immunohistochemistry, Immunofluorescence, ELISA, Western Blot

PRODUCT SYNONYMS

ACSL4 (FACL4); Polyclonal Antibody; ACSL4 (FACL4) Antibody (Center); Long-chain-fatty-acid--CoA ligase 4; Long-chain acyl-CoA synthetase 4; LACS 4; ACSL4; ACS4; FACL4; LACS4; anti-ACSL4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This ACSL4 (FACL4) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-267 amino acids from the Central region of human ACSL4 (FACL4).
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	236-267
Sequence Length	670
Applicable Applications for anti-ACSL4 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



IF (Immunofluorescence)

Confocal immunofluorescent analysis of ACSL4 (FACL4) Antibody (Center) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



WB (Western Blot)

FACL4-E251 western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the FACL4 antibody detected the FACL4 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-ACSL4 antibody	Long chain acyl-CoA synthetase (LACS), or long chain fatty acid-CoA ligase (FACL), converts free long chain fatty acids into fatty acyl-CoA esters, key intermediates in the synthesis of complex lipids. The FACL4 gene encodes a form of LACS and is expressed in several tissues, including brain. FACL4 cDNA from brain encodes a gene product that shows preference for arachidonic acid as a substrate when expressed in mammalian cells. ¹ The sequence of the predicted 670-amino acid human protein is 97% identical to that of rat ACS4. FACL4 is highly expressed in adult human brain, especially in the cerebellum and hippocampus, similar to the mouse. ² A strong cytoplasmic staining was found in the Purkinje and granular cells of the cerebellum and the pyramidal layer of hippocampus, indicating that FACL4 is specifically expressed in neurons and not in glial cells. Two patients with Alport syndrome, elliptocytosis, and mental retardation carried a large deletion of the COL4A5 region that included FACL4. ³ The absence of FACL4 might play a role in the development of mental retardation or other signs associated with Alport syndrome. Two point mutations, 1 missense and 1 splice site change, were reported in the FACL4 gene in 2 families with nonspecific mental retardation. ² Analysis of enzymatic activity in lymphoblastoid cell lines of affected individuals revealed low levels compared with normal cells, indicating that both mutations are null mutations.
Product Categories/Family for anti-ACSL4 antibody	Signal Transduction

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758332
NCBI GeneID	2182
NCBI Accession #	NP_004449.1; NP_075266.1
NCBI GenBank Nucleotide #	NM_004458.2
UniProt Accession #	O60488; O60848; O60849; Q5JWV8; D3DUY2
Molecular Weight	79188
NCBI Official Full Name	long-chain-fatty-acid--CoA ligase 4 isoform 1
NCBI Official Synonym Full Names	acyl-CoA synthetase long-chain family member 4
NCBI Official Symbol	ACSL4
NCBI Official Synonym Symbols	ACS4; FACL4; LACS4; MRX63; MRX68
NCBI Protein Information	long-chain-fatty-acid--CoA ligase 4
UniProt Protein Name	Long-chain-fatty-acid--CoA ligase 4
UniProt Gene Name	ACSL4
UniProt Synonym Gene Names	ACS4; FACL4; LACS4; LACS 4
UniProt Entry Name	ACSL4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.