Datasheet for ABIN357780

anti-ACSL4 antibody (AA 244-274)

3 Images

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Overview

Quantity:	0.4 mL
Target:	ACSL4
Binding Specificity:	AA 244-274
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ACSL4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	KLH conjugated synthetic peptide between 244~274 amino acids from the center region of human FACL4.
Isotype:	Ig Fraction
Specificity:	This antibody is specific to ACSL4/FACL4 (Center).
Purification:	Protein G Chromatography, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

Target Details

Target:	ACSL4
Alternative Name:	ACSL4 (ACSL4 Products)

Target Details

Background:	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.Synonyms: ACS4, FACL4, LACS4, Long-chain acyl-CoA synthetase 4, Long-chain-fatty-acid--CoA ligase 4
Molecular Weight:	79188 Da
Gene ID:	2182, 5874
UniProt:	O60488

Application Details

Application Notes:	ELISA: 1/1,000. Western blot: 1/100-1/500. Immunohistochemistry: 1/50-1/100. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.25 mg/mL
Buffer:	PBS with 0.09 % (W/V) Sodium Azide as preservative.
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at-20 °C for longer.

Images

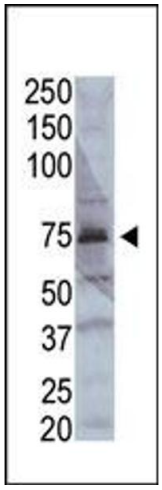

Image 1.

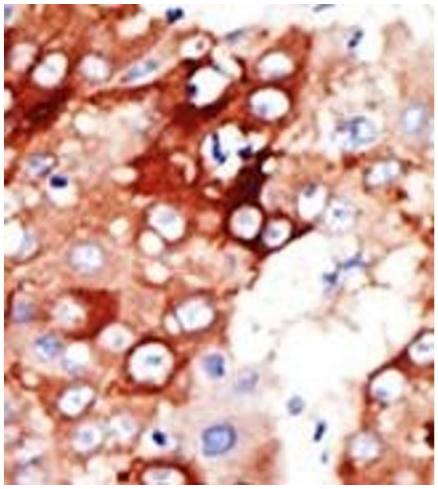

Image 2.

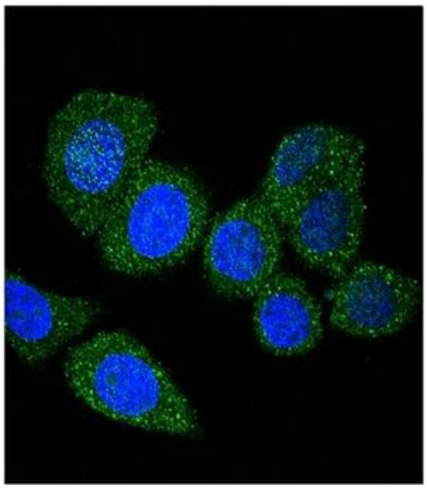

Image 3.

