

DATASHEET

ACSL4 Rabbit Monoclonal Antibody(C1027)

CAT. NO. AMA00639

KEY FEATURES

Target	ACSL4	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoA for both synthesis of cellular lipids, and degradation via beta-oxidation . Preferentially activates arachidonate and eicosapentaenoate as substrates . Preferentially activates 8,9-EET > 14,15-EET > 5,6-EET > 11,12-EET . Modulates glucose-stimulated insulin secretion by regulating the levels of unesterified EETs . Modulates prostaglandin E2 secretion . Acts as an activator of ferroptosis by activating polyunsaturated fatty acids, especially arachidonate and adrenate, to their active form, generating the primary lipid-peroxidation substrates that contribute to ferroptosis .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to ACSL4
Specificity	Recognizes endogenous levels of ACSL4 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human ACSL4. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 79 kD; Observed: 79 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	ACS4; FAFL4; LACS4; Long-chain-fatty-acid--CoA ligase 4; Long-chain acyl-CoA synthetase 4; LACS 4
Gene Symbol	ACSL4
Entrez Gene	2182(Human); 50790(Mouse); 113976(Rat)
SwissProt	O60488(Human); Q9QUJ7(Mouse); O35547(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

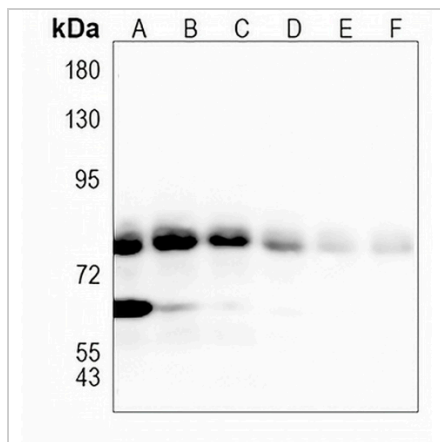
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

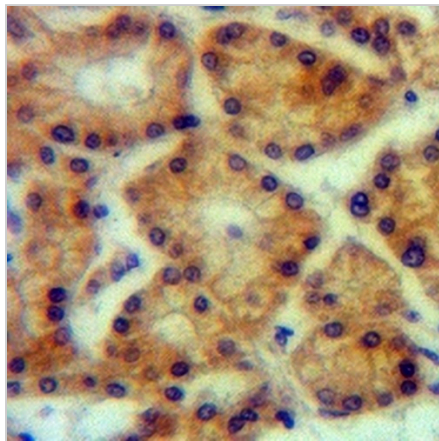
ACSL4 Rabbit Monoclonal Antibody(C1027)

CAT. NO. AMA00639

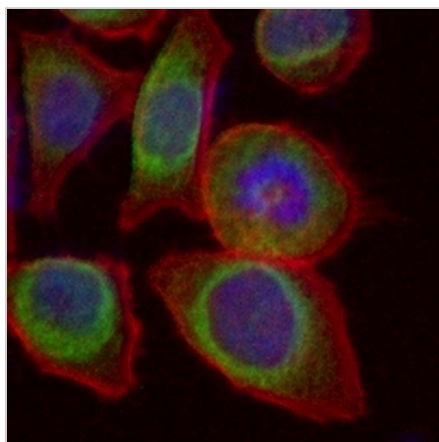
DATA



Western blot analysis of ACSL4 expression in HEK293T (A), HepG2 (B), THP1 (C), mouse liver (D), mouse kidney (E), rat liver (F) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 79 kD)



Immunohistochemical analysis of ACSL4 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of ACSL4 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.