10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1150

Specification

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	O60488
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 79 kDa, observed, 73 kDa KDa**
Gene Name	**ACSL4**
Aliases	**ACSL4; Acyl-CoA Synthetase Long Chain Family Member 4; LACS4; ACS4; FACL4; Fatty-Acid-Coenzyme A Ligase, Long-Chain 4; Long-Chain Fatty-Acid-Coenzyme A Ligase 4; Long-Chain-Fatty-Acid--CoA Ligase 4; Long-Chain Acyl-CoA Synthetase 4; Lignoceroyl-CoA Synthase; Arachidonate--CoA Ligase; EC 6.2.1.3; MRX63; MRX68; Mental Retardation, X-Linked 63; Mental Retardation, X-Linked 68; Acyl-CoA Synthetase 4; EC 6.2.1.15; XLID63; LACS 4**
Immunogen	**A synthesized peptide derived from ACSL4**

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**2182**

Other Names
Long-chain-fatty-acid--CoA ligase 4, 6.2.1.3, Arachidonate--CoA ligase, 6.2.1.15, Long-chain acyl-CoA synthetase 4, LACS 4, ACSL4, ACS4, FACL4, LACS4

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody - Protein Information

Name ACSL4

Synonyms ACS4, FACL4, LACS4

Function
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 (PubMed:21242590, PubMed:22633490, PubMed:24269233). Preferentially activates arachidonate and eicosapentaenoate as substrates (PubMed:21242590). 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 (By similarity). Modulates prostaglandin E2 secretion (PubMed:21242590).

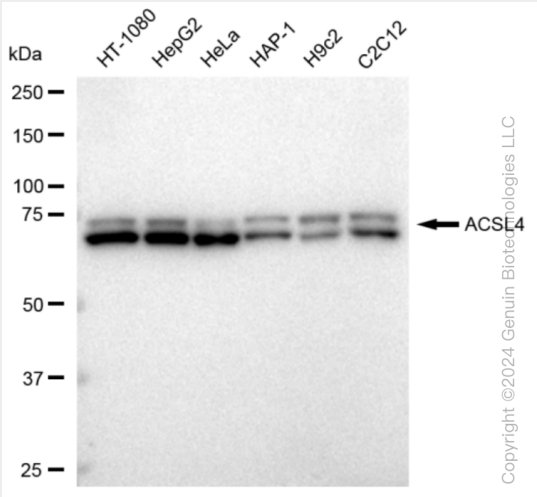
Cellular Location
Mitochondrion outer membrane; Single-pass type III membrane protein. Peroxisome membrane; Single-pass type III membrane protein. Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein. Cell membrane

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

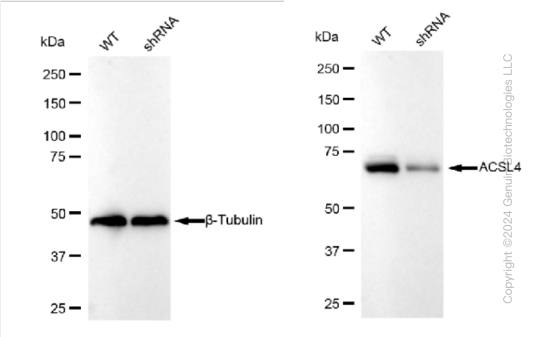
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ACSL4 Rabbit Monoclonal Antibody - Images

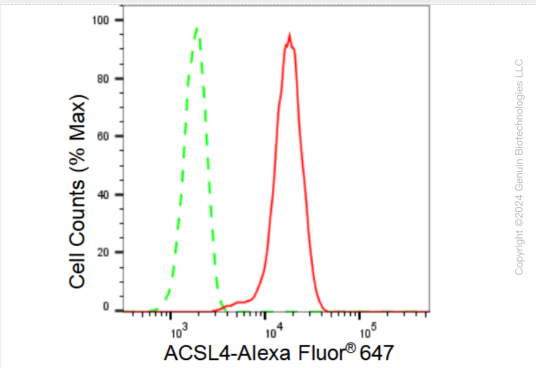


Western blotting analysis using anti-ACSL4 antibody (Cat#AGI1150). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ACSL4 antibody (Cat#AGI1150, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

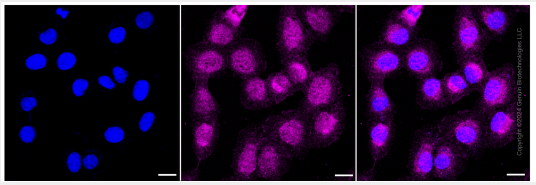
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blotting analysis using anti-ACSL4 antibody (Cat#AGI1150). ACSL4 expression in wild type (WT) and ACSL4 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-ACSL4 antibody (Cat#AGI1150, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ACSL4 expression in HT-1080 cells using ACSL4 antibody (Cat#AGI1150, 1:2,000). Green, isotype control; red, ACSL4.



Immunocytochemical staining of HT-1080 cells with ACSL4 antibody (Cat#AGI1150, 1:1,000). Nuclei were stained blue with DAPI; ACSL4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.