

Product Name: KD-Validated ACSL4 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01647**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 79.2kDa

Antigen Information

Gene Name	ACSL4
Alternative Names	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
Gene ID	2182.0
SwissProt ID	O60488
Immunogen	A synthesized peptide derived from ACSL4

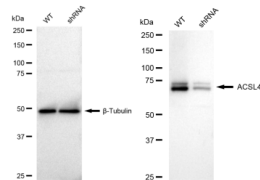
Background

The protein encoded by this gene is an isozyme of the 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 preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the cognitive disability or Alport syndrome. Alternative splicing of this gene generates multiple transcript variants. [provided by RefSeq, Jan 2016]

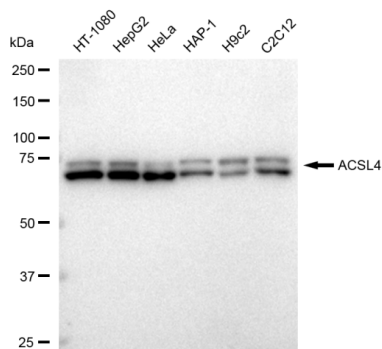
Research Area

Signal Transduction

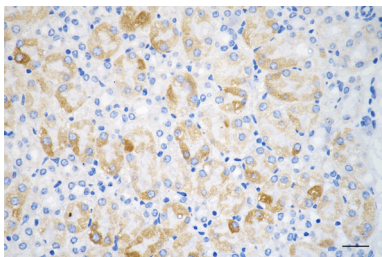
Image Data



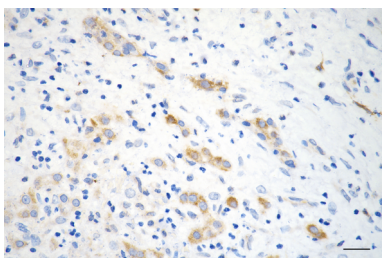
Western blotting analysis using ACSL4 antibody (KVAb01647). ACSL4 expression in wild type (WT) and ACSL4 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ACSL4 antibody (KVAb01647, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



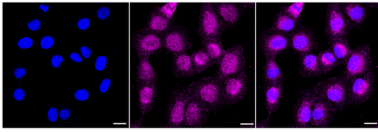
Western blotting analysis using ACSL4 antibody (KVAb01647). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ACSL4 antibody (KVAb01647, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. ACSL4, acyl-CoA synthetase long chain family member 4.



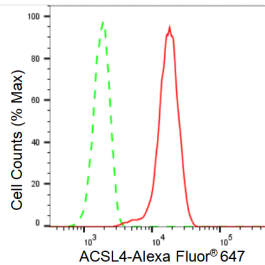
Immunohistochemistry was performed on paraffin-embedded mouse kidney using ACSL4 antibody (KVAb01647, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human hepatocarcinoma using ACSL4 antibody (KVAb01647, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HT-1080 cells with ACSL4 antibody (KVA01647, 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.



Flow cytometric analysis of ACSL4 expression in HT-1080 cells using ACSL4 antibody (KVA01647, 1:2,000). Green, isotype control; red, ACSL4.