

For Research Use Only

# ACSL1 Recombinant monoclonal antibody

Catalog Number:87427-1-RR



## Basic Information

<b>Catalog Number:</b> 87427-1-RR	<b>GenBank Accession Number:</b> BC050073	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2180	<b>CloneNo.:</b> 251988E7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P33121	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> acyl-CoA synthetase long-chain family member 1	
<b>Immunogen Catalog Number:</b> AG5059	<b>Calculated MW:</b> 78 kDa	
	<b>Observed MW:</b> 70-75 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : mouse liver tissue, rat liver tissue
<b>Species Specificity:</b> human, mouse, rat	

## Background Information

ACSL1(Long-chain-fatty-acid--CoA ligase 1) is also named as FACL1, FACL2, LACS, LACS1, LACS2 and belongs to the ATP-dependent AMP-binding enzyme family. ACSL1 is a 75 kDa protein that is associated peripherally with the plasma membrane(Brian M Wiczer, etc., 2006). ACSL1 is abundantly expressed in tissues, such as liver and brown fat, that metabolize substantial amounts of triglycerides as fuel, and as such, a deficiency in ACSL1 function could have a more profound affect in those cells, resulting in hepatosteatosis and potentially increased very low density lipoprotein production by the liver or decreased thermogenic capacity in brown adipose tissue(PMID:19429676). An anti-rat ACSL1 antibody recognized a band of the predicted 68 kDa in high-speed supernatant from rat liver and in human and murine SMCs, monocyte-derived macrophages, and murine peritoneal macrophages (PMID:17259370). It has 2 isoforms produced by alternative splicing.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

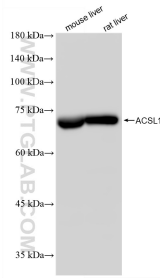
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

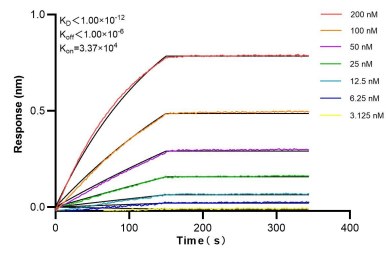
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87427-1-RR (ACSL1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 87427-1-RR against Human ACSL1 were performed. The affinity constant is below 1 pM.