

For Research Use Only

# ACSL1 Recombinant monoclonal antibody, PBS Only

Catalog Number: 87427-1-PBS



## Basic Information

<b>Catalog Number:</b> 87427-1-PBS	<b>GenBank Accession Number:</b> BC050073	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2180	<b>CloneNo.:</b> 251988E7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P33121	
<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

**Tested Applications:**  
WB, Indirect ELISA

**Species Specificity:**  
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 -80°C.

**Storage Buffer:**  
PBS only, pH7.3

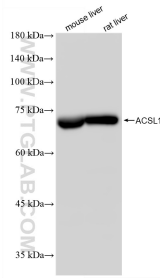
For technical support and original validation data for this product please contact:

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

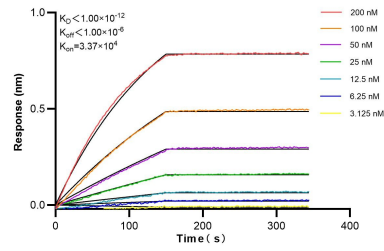
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

## 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. This data was developed using the same antibody clone with 87427-1-PBS in a different storage buffer formulation.



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