

For Research Use Only

# SCD1 Recombinant antibody

Catalog Number: 81468-5-RR



## Basic Information

<b>Catalog Number:</b> 81468-5-RR	<b>GenBank Accession Number:</b> BC005807	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6319	<b>CloneNo.:</b> 241487E12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O00767	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> stearoyl-CoA desaturase (delta-9-desaturase)	
<b>Immunogen Catalog Number:</b> AG29156	<b>Calculated MW:</b> 355 aa, 41 kDa	
	<b>Observed MW:</b> 28-42 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>WB :</b> A549 cells, HEK-293 cells <b>IF/ICC :</b> MCF-7 cells,

## Background Information

SCD1 (stearoyl-CoA desaturase) is a microsomal fatty acid monodesaturase, which catalyses the committed step in the biosynthesis of mono-unsaturated fatty acids from saturated fatty acids (PMID:10946019). SCD1 and SCD2 are the main isoforms expressed in mouse liver and brain respectively (PMID:15907797). The formation of homodimers and oligomers is an intrinsic property of SCD proteins. SCD1 is a multi-pass membrane protein and detected double bands of 37-42 kDa. The degradation product of 28 kDa may be caused by a major cleavage site at the C-terminus (PMID:15610069, PMID: 9843580).

## Storage

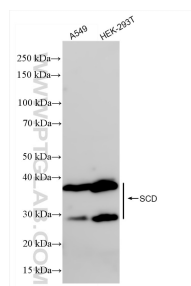
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

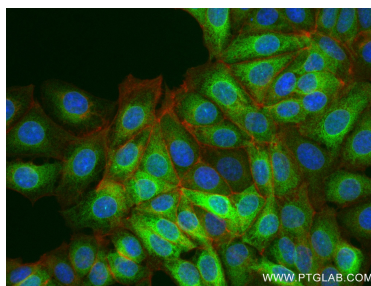
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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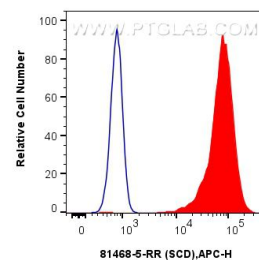
## Selected Validation Data



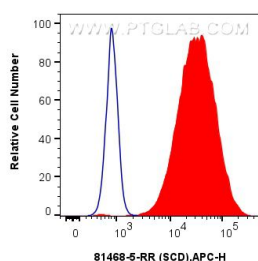
Various lysates were subjected to SDS PAGE followed by western blot with 81468-5-RR (SCD antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



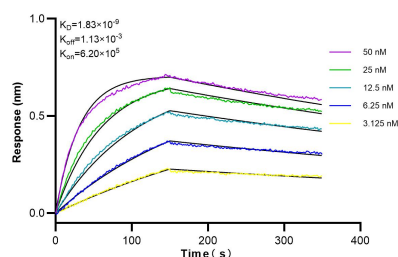
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using SCD antibody (81468-5-RR, Clone: 241487E12) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.25 ug SCD Recombinant antibody (81468-5-RR, Clone:241487E12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.25 ug SCD Recombinant antibody (81468-5-RR, Clone:241487E12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 81468-5-RR against Human SCD were performed. The affinity constant is 1.83 nM.