For Research Use Only

SCD1 Recombinant monoclonal antibody, PBS Only

Catalog Number:81468-5-PBS



Basic Information

Catalog Number: 81468-5-PBS

GenBank Accession Number: BC005807

Purification Method: Protein A purfication

Source: Rabbit

AG29156

GeneID (NCBI): 6319

UNIPROT ID:

desaturase)

CloneNo.: 241487E12

Isotype: IgG

Immunogen Catalog Number:

O00767 Full Name:

stearoyl-CoA desaturase (delta-9-

Calculated MW: 355 aa, 41 kDa Observed MW: 28-42 kDa

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human

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

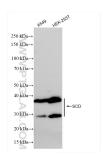
Storage:

Store at -80°C.

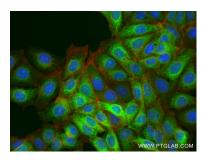
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C $\,$

Storage Buffer: PBS only, pH7.3

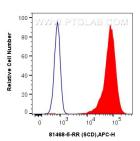
Selected Validation Data



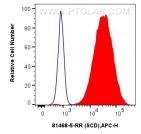
Various lysates were subjected to SDS PAGE followed by western blot with 81468-5-RR (SCD antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81468-5-PBS in a different storage buffer formulation.



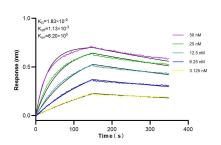
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using SCD antibody (81468-5-RR, Clone: 241487E12) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81468-5-PBS in a different storage buffer formulation.



1x10^6 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. This data was developed using the same antibody clone with 81468-5-PBS in a different storage buffer formulation.



tx10^6 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. This data was developed using the same antibody clone with 81468-5-PBS in a different storage buffer formulation.



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