

# SCD Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 50 - 150 of Human SCD.
Form	Liquid
Concentration	0.9 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.02% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_10982251

Applications	Tested Dilution	Publications
Western Blot (WB)	2 µg/mL	2 Publications
Immunocytochemistry (ICC/IF)	5-10 µg/mL	-
Immunoprecipitation (IP)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

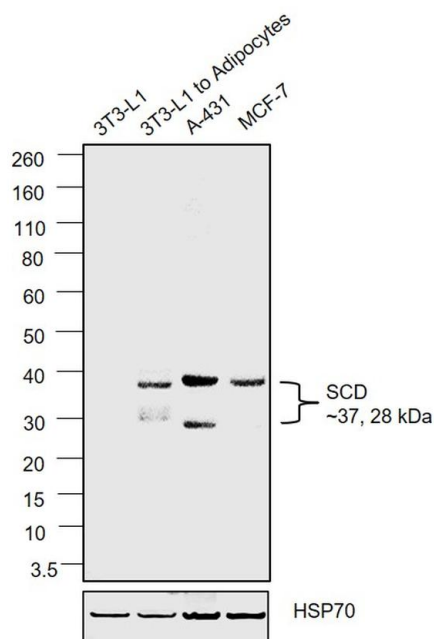
## Product Specific Information

This antibody is predicted to react with mouse based on sequence homology.

## Product Images For SCD Polyclonal Antibody

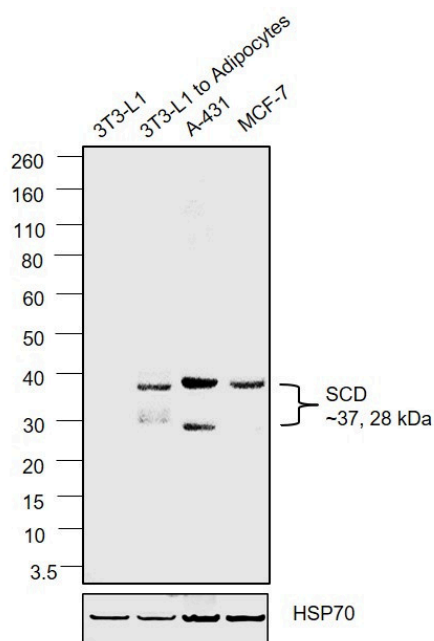
### SCD Antibody (PA5-19682) in WB

Western blot was performed using Anti-SCD Polyclonal Antibody (Product # PA5-19682) and 37, 28 kDa bands corresponding to SCD was observed across all the cell lines tested except undifferentiated 3T3-L1. Whole cell extracts (30 µg lysate) of undifferentiated 3T3-L1 preadipocytes (Lane 1), 3T3-L1 differentiated to adipocytes (Lane 2), A-431 (Lane 3) and MCF-7 (Lane 4) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (2 µg/mL) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



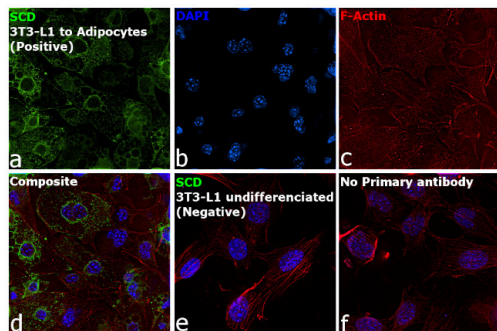
### SCD Antibody (PA5-19682)

Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue tested owing to their inherent genetic constitution. Relative expression of SCD was observed in 3T3L-1 differentiated to adipocytes, A-431 and MCF-7 in comparison to undifferentiated 3T3L-1, using Anti-SCD Polyclonal Antibody (Product # PA5-19682) in Western Blot. {RE}



### SCD Antibody (PA5-19682) in ICC/IF

Immunofluorescence analysis of SCD was performed using 70% confluent log phase 3T3-L1 undifferentiated and 3T3-L1 differentiated to adipocytes. The cells were fixed with 4% Paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with SCD Polyclonal Antibody (Product # PA5-19682) at 5 µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 (Product # A27034, 1:2000 dilution) for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing ER like cytoplasmic localization. Panel e represents undifferentiated 3T3L-1 cells having no expression of SCD. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



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## Western Blot (2)

Cell reports	Year 2020
<b>Concurrent Mutations in STK11 and KEAP1 Promote Ferroptosis Protection and SCD1 Dependence in Lung Cancer.</b>	
"Published figure using SCD polyclonal antibody (Product # PA5-19682) in Western Blot"	
Authors: Wohlihieter CA,Richards AL,Uddin F,Hulton CH,Quintanal-Villalonga A,Martin A,de Stanchina E,Bhanot U,Asher M,Shah NS,Hayatt O,Buonocore DJ,Rekhtman N,Shen R,Arbour KC,Donoghue M,Poirier JT,Sen T,Rudin CM	

Nature chemical biology	Year 2016
<b>Discovery of tumor-specific irreversible inhibitors of stearoyl CoA desaturase.</b>	
"PA5-19682 was used in immunoprecipitation and western blot to characterize inhibitors of stearoyl CoA desaturase as cancer therapeutics"	
Authors: Theodoropoulos PC,Gonzales SS,Winterton SE,Rodriguez-Navas C,McKnight JS,Morlock LK,Hanson JM,Cross B,Owen AE,Duan Y,Moreno JR,Lemoff A,Mirzaei H,Posner BA,Williams NS,Ready JM,Nijhawan D	
Species Human	

## Immunoprecipitation (1)

Nature chemical biology	Year 2016
<b>Discovery of tumor-specific irreversible inhibitors of stearoyl CoA desaturase.</b>	
"PA5-19682 was used in immunoprecipitation and western blot to characterize inhibitors of stearoyl CoA desaturase as cancer therapeutics"	
Authors: Theodoropoulos PC,Gonzales SS,Winterton SE,Rodriguez-Navas C,McKnight JS,Morlock LK,Hanson JM,Cross B,Owen AE,Duan Y,Moreno JR,Lemoff A,Mirzaei H,Posner BA,Williams NS,Ready JM,Nijhawan D	
Species Human	

## Miscellaneous PubMed (1)

Nature chemical biology	Year 2016
<b>Discovery of tumor-specific irreversible inhibitors of stearoyl CoA desaturase.</b>	
"PA5-19682 was used in immunoprecipitation and western blot to characterize inhibitors of stearoyl CoA desaturase as cancer therapeutics"	
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Species Human	

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