

SAP97 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues V(115) L P S E R I S P Q V P N E V L G P E(133) of rat SAP97.
Form	Liquid
Purification	Ammonium sulfate precipitation
Storage buffer	PBS
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2092020

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:250	4 Publications
Immunofluorescence (IF)	1:250	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	1:1,000	-
Immunoprecipitation (IP)	Assay dependent	5 Publications
Western Blot (WB)	1:500-1:5000	12 Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

PA1-741 detects Synapse-Associated Protein 97 (SAP97) from human, rat and mouse tissues. No cross-reactivity to other proteins, including synapse-associated protein family members, has been observed.

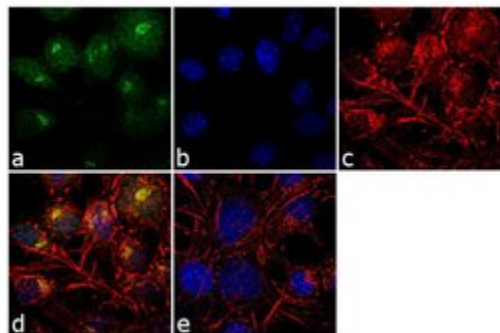
PA1-741 has been successfully used in Western blot, immunofluorescence, immunocytochemistry, immunoprecipitation, and immunohistochemistry procedures. By Western blot, this antibody detects an ~140 kDa protein representing SAP97 from rat brain extract. Immunohistochemical staining of SAP97 in rat hippocampus with PA1-741 results in intense neuronal cell body and dendrite staining.

The PA1-741 immunizing peptide corresponds to amino acids 115-133 from rat SAP97. This sequence is 84% and 74% conserved

in mouse and human SAP97, respectively.

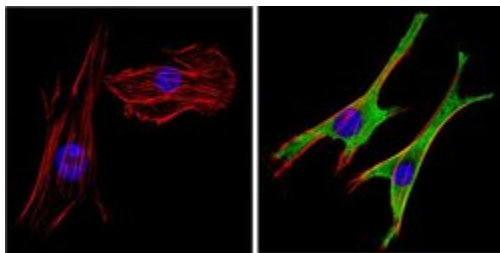
PA1-741 can be used with blocking peptide PEP-055.

Product Images For SAP97 Polyclonal Antibody



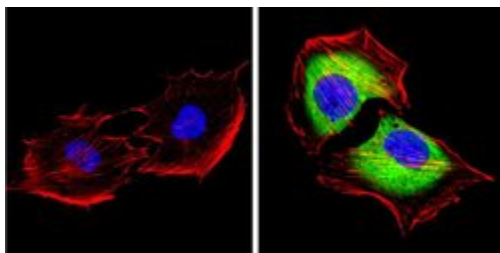
SAP97 Antibody (PA1-741) in IF

Immunofluorescence analysis of SAP97 was performed using 70% confluent log phase RSC96 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with SAP97 Rabbit Polyclonal Antibody (Product # PA1-741) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 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 cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



SAP97 Antibody (PA1-741) in IF

Immunofluorescent analysis of SAP97 (green) showing staining in the cytoplasm and membrane of NIH-3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a SAP97 polyclonal antibody (Product # PA1-741) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



SAP97 Antibody (PA1-741) in IF

Immunofluorescent analysis of SAP97 (green) showing staining in the cytoplasm and membrane of C2C12 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a SAP97 polyclonal antibody (Product # PA1-741) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.

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Immunocytochemistry (4)

Frontiers in synaptic neuroscience

Proteomic Analysis of Dendritic Filopodia-Rich Fraction Isolated by Telencephalin and Vitronectin Interaction.

"PA1-741 was used in Immunocytochemistry-immunofluorescence to examine the molecular constituents of dendritic filopodia."

Authors: Furutani Y, Yoshihara Y

Species
Mouse

Dilution
1:1,000

Year
2019

Hippocampus

N-terminal SAP97 isoforms differentially regulate synaptic structure and postsynaptic surface pools of AMPA receptors.

"PA1741 was used in immunocytochemistry to investigate diverging presynaptic and postsynaptic roles of SAP97 N-terminal isoforms in synapse maturation and plasticity"

Authors: Goodman L, Baddeley D, Ambroziak W, Waites CL, Garner CC, Soeller C, Montgomery JM

Species
Rat

Dilution
1:1000

Year
2017

[View more ICC references on thermofisher.com](#)

Immunofluorescence (5)

Frontiers in synaptic neuroscience

Proteomic Analysis of Dendritic Filopodia-Rich Fraction Isolated by Telencephalin and Vitronectin Interaction.

"PA1-741 was used in Immunocytochemistry-immunofluorescence to examine the molecular constituents of dendritic filopodia."

Authors: Furutani Y, Yoshihara Y

Species
Mouse

Dilution
1:1,000

Year
2019

Cell reports

Upregulation of 3A Drives Homeostatic Plasticity by Rerouting AMPAR into the Recycling Endosomal Pathway.

"Published figure using SAP97 polyclonal antibody (Product # PA1-741) in Immunocytochemistry"

Authors: Steinmetz CC, Tatavarty V, Sugino K, Shima Y, Joseph A, Lin H, Rutlin M, Lambo M, Hempel CM, Okaty BW, Paradis S, Nelson SB, Turrigiano GG

Species
Not Applicable

Dilution
Not Cited

Year
2016

[View more IF references on thermofisher.com](#)

More applications with references on thermofisher.com

WB (12) **IP (5)** **IHC (6)** **Misc (1)** **IHC (Free) (1)**

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