Mouse SHANK3 Monoclonal Antibody | anti-Shank3 antibody

SHANK3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103198	**Mouse**	**Mouse, Human, Rat**	**Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot**

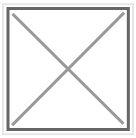
PRODUCT SYNONYMS

SHANK3; Monoclonal Antibody; SHANK3 Antibody; Shank3; Prosap2; anti-Shank3 antibody

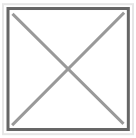
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Mouse, Human, Rat
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	S69-46
Form/Format	Protein G Purified; PBS pH7.4, 50% glycerol, 0.09% sodium azide
Concentration	1mg/mL (varies by lot)
Sequence Length	1740
Applicable Applications for anti-Shank3 antibody	AM (Antibody Microarray), IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Synthetic peptide amino acids 840-857 of rat Shank3
Certificate of Analysis	1ug/mL was sufficient for detection of Shank3 in 10ug COS cell lysate transiently transfected with Shank3 by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.
Cellular Location	Cytoplasm, Cell Junction, Synapse, Postsynatic Cell Membrane, Postsynaptic Density
Research Area	Neuroscience, Cell Markers, Neuron Markers, Postsynaptic Density
Preparation and Storage	-20 degree C

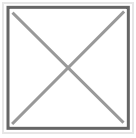
IMAGES



WB (Western Blot)
Western Blot analysis of Rat brain membrane lysate showing detection of SHANK3 protein using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20 degree C. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Borderline positive.



IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Early stages of filaggrin-like and dermal staining.

ADDITIONAL INFORMATION

Related Product Information for anti-Shank3 antibody	**Background Info:** Detects ~190kDa. No cross-reactivity against Shank1 or Shank2. **Function:** Shank proteins make up a family of scaffold proteins identified through their interaction with a variety of membrane and cytoplasmic proteins (1). Shank proteins at postsynaptic sites of excitatory synapses play roles in signal transmission into the postsynaptic neuron. Shank proteins are also crucial in receptor tyrosine kinase signaling; specifically, Shank3 can mediate Erk-MAPK and P13K signaling which is crucial for tubule formation (2). Shank3 is also one of the latest genes to be associated with autism. A mutation of a single copy of Shank3 on chromosome 22q13 can result in language and/or social communication disorders (3).
Product Categories/Family for anti-Shank3 antibody	Neuroscience; Scaffolds
References	1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.: Sunderland, MA USA. 2. www.iochannels.org 3. Sheng M., and Kim E. (2000) Journal of Cell Science. 113: 1851-1856. 4. Schuetz G., et al. (2004) JCB. 167(5): 645-952. 5. Durand C.M., et al. (2007) Nature Genetics. 39: 25-27.

NCBI AND UNIPROT INFORMATION

NCBI GI #	11067399
NCBI GeneID	59312
NCBI Accession #	NP_067708.1
NCBI GenBank Nucleotide #	NM_021676.1
UniProt Accession #	Q9JLU4; Q9WUY7; Q9WV47
NCBI Official Full Name	SH3 and multiple ankyrin repeat domains protein 3
NCBI Official Synonym Full Names	SH3 and multiple ankyrin repeat domains 3
NCBI Official Symbol	Shank3
NCBI Official Synonym Symbols	Prosap2
NCBI Protein Information	SH3 and multiple ankyrin repeat domains protein 3; SPANK-2; SH3/ankyrin domain gene 3; Shank postsynaptic density protein 3a; proline rich synapse associated protein 2; proline-rich synapse-associated protein 2
UniProt Protein Name	SH3 and multiple ankyrin repeat domains protein 3
UniProt Gene Name	**Shank3**
UniProt Synonym Gene Names	Prosap2; Shank3; ProSAP2
UniProt Entry Name	SHAN3_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.