

## Product Datasheet

### SHANK3 Antibody (FITC) (orb148740)

<b>Catalog Number</b>	orb148740
<b>Category</b>	Antibodies
<b>Description</b>	Mouse monoclonal to SHANK3 (FITC). Shank proteins make up a family of scaffold proteins identified through their interaction with a variety of membrane and cytoplasmic proteins. 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. 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..
<b>Target</b>	SHANK3
<b>Clonality</b>	Recombinant
<b>Species/Host</b>	Mouse
<b>Isotype</b>	IgG2b
<b>Conjugation</b>	FITC
<b>Reactivity</b>	Human, Mouse, Rat
<b>Concentration</b>	1 mg/ml
<b>Buffer/Preservatives</b>	640.91mM DMSO, 136.36 mM Ethanolamine, 126.89 mM chlorides, 9.09mM phosphates, 9.09mM NaHCO <sub>3</sub>
<b>Purification</b>	Protein G Purified
<b>Immunogen</b>	Synthetic peptide amino acids 840-857 of rat Shank3

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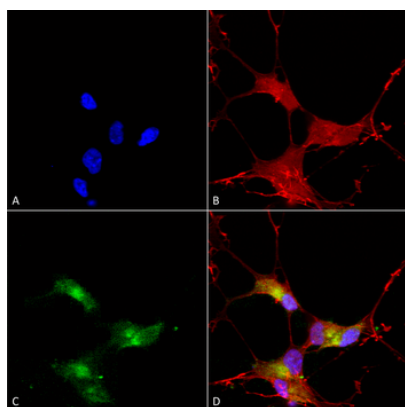
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<b>UniProt ID</b>	<b>Q9JLU4</b>
<b>MW</b>	190kDa
<b>Tested applications</b>	AM, ICC, IF, IHC, IP, WB
<b>Dilution range</b>	WB (1:1000), IHC (1:100), ICC/IF (1:100)
<b>Application notes</b>	1 µg/ml was sufficient for detection of Shank3 in 10 µg COS cell lysate transiently transfected with Shank3 by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.
<b>Specificity</b>	Detects ~190kDa. No cross-reactivity against Shank1 or Shank2.
<b>Antibody Type</b>	Recombinant Antibody
<b>Clone Number</b>	S69
<b>Storage</b>	Conjugated antibodies should be stored according to the product label
<b>Note</b>	For research use only
<b>Entrez</b>	<b>59312</b>
<b>NCBI</b>	<b>NP_067708.1</b>
<b>Expiration Date</b>	12 months from date of receipt.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) SHANK3 Antibody (D) Composite.

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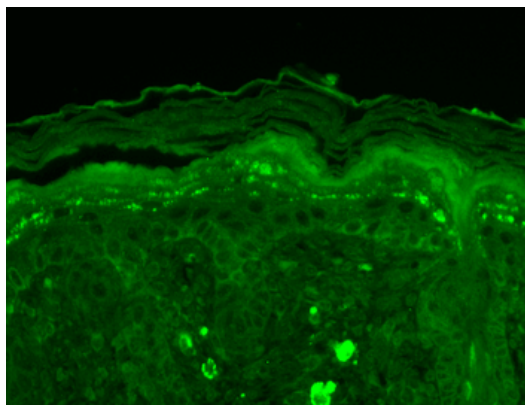
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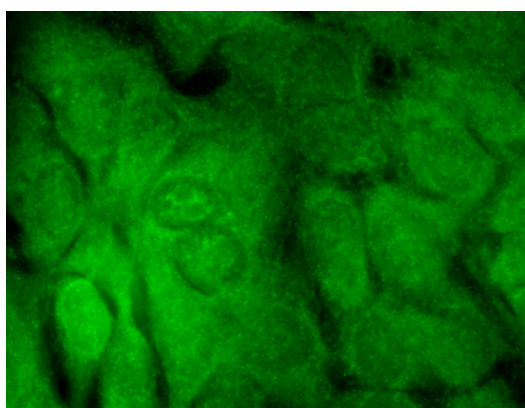
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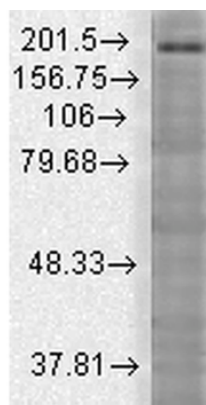
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Immunohistochemistry analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:100 for 1 hour 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.



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°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.



Western Blot analysis of Rat brain membrane lysate showing detection of SHANK3 protein using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46. Load: 15 µg. 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.

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