

SHANK1/SHANK3 Antibody
SHANK1/SHANK3 Antibody, Clone S367-51
Catalog # ASM10292**Specification****SHANK1/SHANK3 Antibody - Product Information**

Application	WB
Primary Accession	O9JLU4
Other Accession	NP_067708.1
Host	Mouse
Isotype	IgG2a
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description

Mouse Anti-Rat SHANK1/SHANK3 Monoclonal IgG2a

Target/Specificity

Detects ~190kDa. Cross-reacts with SHANK1. Does not cross-react with SHANK2.

Other Names

Shank postsynaptic density protein Antibody, SH3 and multiple ankyrin repeat domains 3 Antibody, Proline rich synapse associated protein 2 Antibody, Proline-rich synapse-associated protein 2 Antibody, ProSAP2 Antibody, PSAP2 Antibody, Antibody, SH3 and multiple ankyrin repeat domains protein 3 Antibody, SH3/ankyrin domain gene 3, Shank3b Antibody, SPANK 2 Antibody, SPANK2 Antibody, KAP/SAPAP interacting protein Antibody, OTTHUMP00000174437 Antibody, SH3 and multiple ankyrin repeat domains 1 Antibody, SH3 and multiple ankyrin repeat domains protein 1 Antibody, SH3/ankyrin domain gene 1 Antibody, SHANK 1 Antibody, Shank1 Antibody, Shank1a Antibody, Somatostatin receptor interacting protein Antibody, Somatostatin receptor-interacting protein Antibody, SPANK 1 Antibody, SPANK1 Antibody, SSTR interacting protein Antibody, SSTR-interacting protein Antibody, SSTRIP Antibody, Synamon Antibody, A1841104 Antibody, DEL22q13.3 Antibody, KIAA1650 Antibody

Immunogen

Fusion protein amino acids 538-626 (SH3 domain) of rat SHANK3. Mouse: 100% identity (89/89 amino acids identical). Human: 97% identity (87/89 amino acids identical). ~70% identity with SHANK1 and SHANK2.

Purification

Protein G Purified

Storage **-20°C****Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature **Blue Ice or 4°C****Certificate of Analysis**

1 µg/ml of SMC-460 was sufficient for detection of SHANK1/SHANK3 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

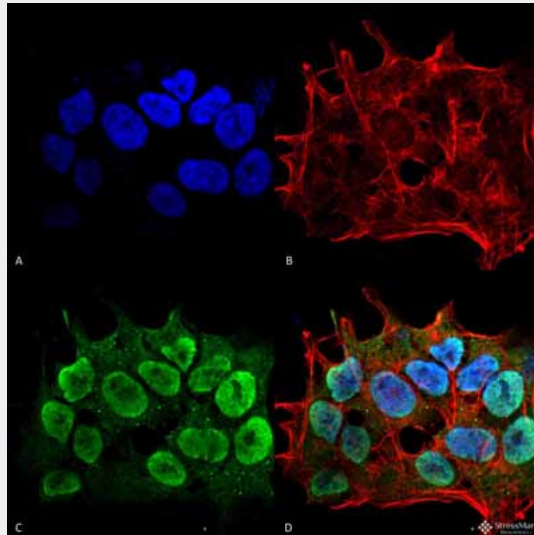
Cytoplasm | Cell Junction

SHANK1/SHANK3 Antibody - Protocols

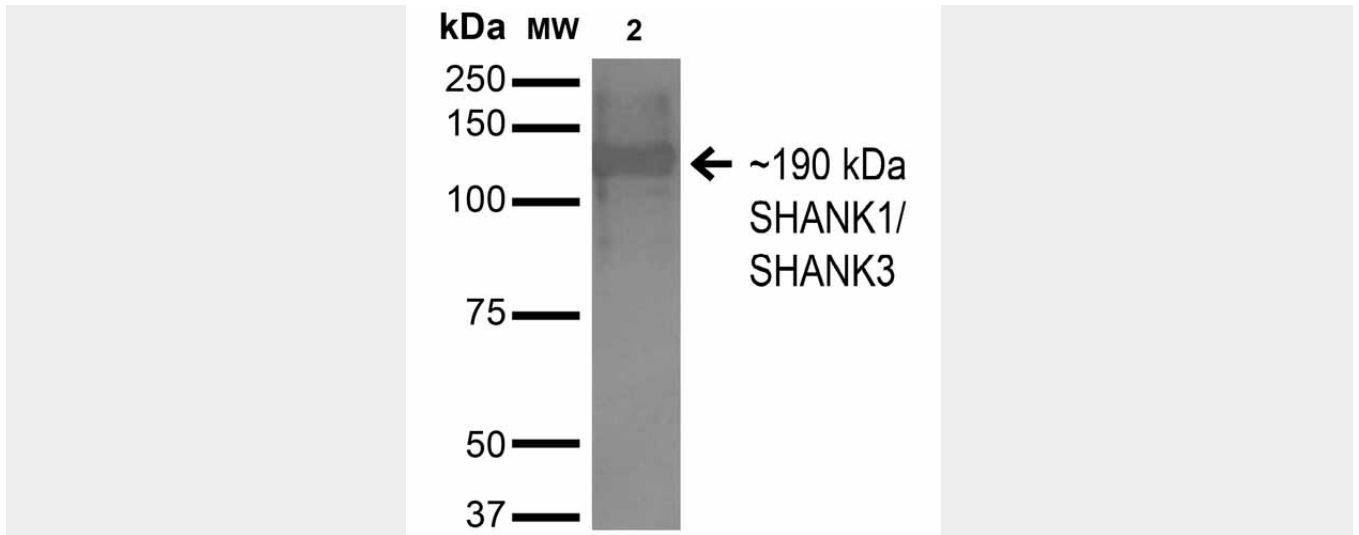
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SHANK1/SHANK3 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK1/SHANK3 Monoclonal Antibody, Clone S367-51 (ASM10292). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SHANK1/SHANK3 Monoclonal Antibody (ASM10292) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) SHANK1/SHANK3 Antibody (D) Composite.



Western Blot analysis of Monkey COS cells transfected with HA-tagged Shank1 showing detection of ~190 kDa SHANK1/SHANK3 protein using Mouse Anti-SHANK1/SHANK3 Monoclonal Antibody, Clone S367-51 (ASM10292). Lane 1: Molecular Weight Ladder. Lane 2: Monkey COS cells transfected with HA-tagged Shank1. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-SHANK1/SHANK3 Monoclonal Antibody (ASM10292) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~190 kDa.

SHANK1/SHANK3 Antibody - Background

SHANK proteins are scaffolding adaptors that have been shown to integrate neurotransmitter receptors into the cortical cytoskeleton at postsynaptic densities. SHANK1-3 of the SHANK/ProSAP family are molecular scaffolds in the postsynaptic density (PSD). SHANK recruits betaPIX and PAK to dendritic spines to regulate postsynaptic structure and interacts with ionotropic receptor and metabotropic glutamate receptor complexes. Transcript splice variation in the Shank family influences the spectrum of Shank-interacting proteins in the PSDs of adult and developing brain to ensure normal development.