

SHANK2 Antibody
SHANK2 Antibody, Clone S23b-6
Catalog # ASM10204

Specification

SHANK2 Antibody - Product Information

Application	WB
Primary Accession	O9OX74
Other Accession	NP_958738.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description

Mouse Anti-Rat SHANK2 Monoclonal IgG1

Target/Specificity

Detects ~160kDa. No cross-reactivity against Shank1 or Shank3. Weak mouse detection.

Other Names

Shank2 Antibody, PROSAP1 Antibody, cortactin binding protein 1 Antibody, KIAA1022 Antibody, AUTS17 Antibody, CortBP1 Antibody, Proline-rich synapse-associated protein 1 Antibody, SH3 and multiple ankyrin repeat domains protein 2 Antibody, Cortactin-binding protein 1 Antibody, proline-rich synapse associated protein 1 Antibody, SPANK-3 Antibody, GKAP/SAPAP interacting protein Antibody, SHANK Antibody, cortactin SH3 domain-binding protein Antibody, ProSAP1 Antibody, CORTBP1CTTNBP1 Antibody, SH3 and multiple ankyrin repeat domains 2 Antibody

Immunogen

Fusion protein amino acids 84-309 (SH3/PDZ domains) of rat Shank2 (SH3 and multiple ankyrin repeat domains protein 2)

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

Certificate of Analysis

1 µg/ml of SMC-328 was sufficient for detection of Shank2 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

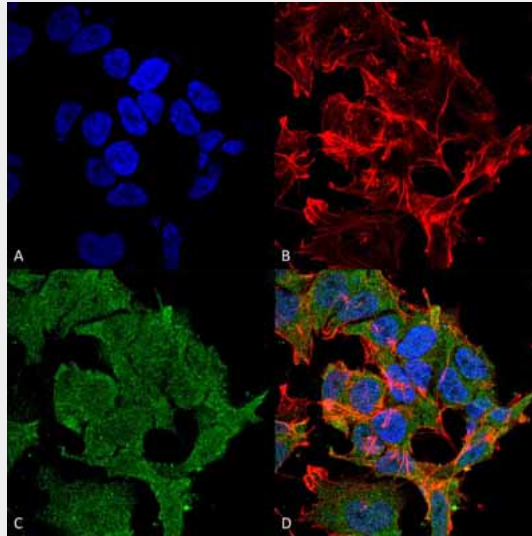
Cytoplasm | Cell Junction | Synapse | Postsynaptic Cell Membrane | Postsynaptic Density | Cell Projection | Growth Cone

SHANK2 Antibody - Protocols

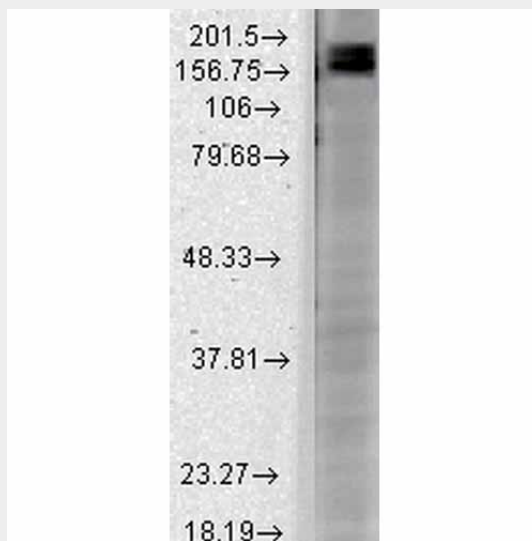
Provided below are standard protocols that you may find useful for product applications.

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

SHANK2 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK2 Monoclonal Antibody, Clone S23b-6 (ASM10204). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SHANK2 Monoclonal Antibody (ASM10204) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm . Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) SHANK2 Antibody (D) Composite.



Western Blot analysis of Rat brain membrane lysate showing detection of SHANK2 protein using

Mouse Anti-SHANK2 Monoclonal Antibody, Clone S23b-6 (ASM10204). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-SHANK2 Monoclonal Antibody (ASM10204) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

SHANK2 Antibody - Background

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. Studies suggest that Shank2 is expressed in the neurons of the developing retina, and could play a role in the neuronal differentiation of the developing retina (2). Other recent studies suggest that the disruption of glutamate receptors at the Shank postsynaptic platform could contribute to the destruction of the postsynaptic density, which underlies the synaptic dysfunction and loss in Alzheimer's disease (3).

SHANK2 Antibody - References

1. Sheng M., and Kim E. (2000) *Journal of Cell Science*. 113: 1851-1856.
2. Kim J.H., et al. (2009) *Exp Mol Med*. 41(4): 236-242.
3. Gong Y., et al. (2009) *Brain Res*. 1292: 191-198.