

**SHANK2 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12783c****Specification**

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**SHANK2 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q9UPX8</a>
Other Accession	<a href="#">Q80Z38</a> , <a href="#">NP_036441.2</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	201261
Antigen Region	879-908

**SHANK2 Antibody (Center) - Additional Information****Gene ID** 22941**Other Names**

SH3 and multiple ankyrin repeat domains protein 2, Shank2, Cortactin-binding protein 1, CortBP1, Proline-rich synapse-associated protein 1, SHANK2, CORTBP1, KIAA1022, PROSAP1

**Target/Specificity**

This SHANK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 879-908 amino acids from the Central region of human SHANK2.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SHANK2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**SHANK2 Antibody (Center) - Protein Information****Name** SHANK2**Synonyms** CORTBP1, KIAA1022, PROSAP1

**Function** Seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction.

**Cellular Location**

Apical cell membrane. Cytoplasm. Synapse. Postsynaptic density. Cell projection, growth cone. Cell projection, dendritic spine. Note=Colocalizes with cortactin in growth cones in differentiating hippocampal neurons Colocalized with PDE4D to the apical membrane of colonic crypt cells (By similarity).

**Tissue Location**

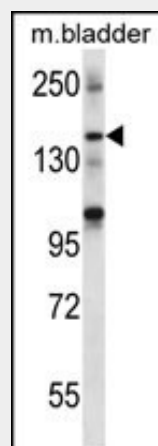
Isoform 3 is present in epithelial colonic cells (at protein level).

**SHANK2 Antibody (Center) - 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 (Center) - Images**



SHANK2 Antibody (Center) (Cat. #AP12783c) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the SHANK2 antibody detected the SHANK2 protein (arrow).

**SHANK2 Antibody (Center) - Background**

This gene encodes a protein that is a member of the Shank family of synaptic proteins that may function as molecular scaffolds in the postsynaptic density (PSD). Shank proteins contain multiple domains for protein-protein interaction, including ankyrin repeats, an SH3 domain, a PSD-95/Dlg/ZO-1 domain, a sterile alpha

motif domain, and a proline-rich region. This particular family member contains a PDZ domain, a consensus sequence for cortactin SH3 domain-binding peptides and a sterile alpha motif. The alternative splicing demonstrated in Shank genes has been suggested as a mechanism for regulating the molecular structure of Shank and the spectrum of Shank-interacting proteins in the PSDs of adult and developing brain. Two alternative splice variants, encoding distinct isoforms, are reported. Additional splice variants exist but their full-length nature has not been determined. [provided by RefSeq].

#### **SHANK2 Antibody (Center) - References**

Pinto, D., et al. Nature 466(7304):368-372(2010)  
Berkel, S., et al. Nat. Genet. 42(6):489-491(2010)  
Lee, J.S., et al. J. Biol. Chem. 285(11):8104-8113(2010)  
Wu, C., et al. Proteomics 7(11):1775-1785(2007)  
Olsen, J.V., et al. Cell 127(3):635-648(2006)