

SHANK2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12783c

Specification

SHANK2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9UPX8</u> <u>O80Z38</u>, <u>NP_036441.2</u> Mouse Rabbit Polyclonal Rabbit IgG 201261 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 E~~Use at an assay dependent concentration.

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

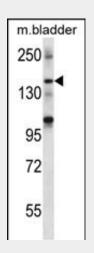
Isoform 3 is present in epithelial colonic cells (at protein level).

SHANK2 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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)