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SHANK2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12783c

Product Information

Application	WB, E
Primary Accession	Q9UPX8
Other Accession	Q80Z38, NP_036441.2
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31120
Calculated MW	201261
Antigen Region	879-908

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.

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).

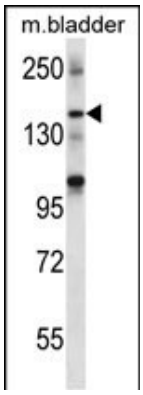
Background

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].

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.