

SHANK2 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP12783c

Specification

SHANK2 Antibody (Center) Blocking peptide - Product Information

Primary Accession

Q9UPX8

SHANK2 Antibody (Center) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SHANK2 Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols

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

Blocking Peptides

SHANK2 Antibody (Center) Blocking peptide - Images

SHANK2 Antibody (Center) Blocking peptide - Background

This gene encodes a protein that is a member of the Shankfamily of synaptic proteins that may function as molecularscaffolds in the postsynaptic density (PSD). Shank proteins containmultiple domains for protein-protein interaction, including ankyrinrepeats, an SH3 domain, a PSD-95/Dlg/ZO-1 domain, a sterile alphamotif domain, and a proline-rich region. This particular familymember contains a PDZ domain, a consensus sequence for cortactinSH3 domain-binding peptides and a sterile alpha motif. Thealternative splicing demonstrated in Shank genes has been suggested as a mechanism for regulating the molecular structure of Shank andthe spectrum of Shank-interacting proteins in the PSDs of adult anddeveloping 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) Blocking peptide - 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)