

SHANK2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12783c

Product Information

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

Additional Information

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| 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

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| Name | SHANK2 |
| Synonyms | CORTBP1, KIAA1022, PROSAP1 |

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| 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). |

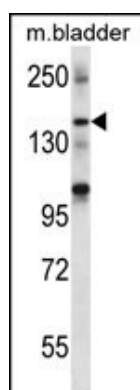
Background

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).

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