

Product name:	Shank 2 Rabbit Polyclonal Antibody
Cat number:	ABN17852
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human SHANK2. AA range:331-380
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight:	135kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 of excitatory synapses. Shank proteins contain multiple domains for protein-protein interaction, including ankyrin repeats, and an SH3 domain. 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 postsynaptic densities of the adult and developing brain. Alterations in the encoded protein may be associated with susceptibility to autism spectrum disorder. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014], alternative products: Additional isoforms seem to exist, domain: The PDZ domain is required for interaction with GRID2, PLCB3, CFTR and SLC9A3., 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., similarity: Belongs to the SHANK family., similarity: Contains 1 PDZ (DHR) domain., similarity: Contains 1 SAM (sterile alpha motif) domain., subcellular location: Cytoplasm, postsynaptic density of neuronal cells., subunit: Interacts with CCTN/cortactin SH3 domain, DLGAP1/GKAP and alpha-latrotoxin receptor 1. Is part of a complex with DLG4/PSD-95 and DLGAP1/GKAP. Interacts with GRID2, SLC9A3, CFTR and PLCB3. Interacts with DBNL (By similarity). Interacts with DNM2. Interacts with BAIAP2., tissue specificity: Isoform E is present in epithelial colonic cells (at protein level),.