

Immunotag™ Shank 2 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4283
Product Description	Immunotag™ Shank 2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SHANK2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human SHANK2. AA range:331-380
Specificity	Shank 2 Polyclonal Antibody detects endogenous levels of Shank 2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	SHANK2
Accession No.	Q9UPX8 Q80Z38
Alternate Names	SHANK2; CORTBP1; KIAA1022; SH3 and multiple ankyrin repeat domains protein 2; Shank2; Cortactin-binding protein 1; CortBP1; Proline-rich synapse-associated protein 1

Antibody Specification

Description	SH3 and multiple ankyrin repeat domains 2(SHANK2) Homo sapiens 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],
Protein Expression	Brain,Epithelium,PCR rescued clones,
Subcellular Localization	photoreceptor outer segment,photoreceptor inner segment,cytoplasm,neurofilament,plasma membrane,ionotropic glutamate receptor complex,postsynaptic density,integral component of membrane,apical plasma membrane,cell junction,
Protein Function	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).,
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