




Product datasheet

Anti-SHANK2 antibody ab189398

2 Images

Overview

| | |
|----------------------------|--|
| Product name | Anti-SHANK2 antibody |
| Description | Rabbit polyclonal to SHANK2 |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P, WB |
| Species reactivity | Reacts with: Mouse, Human Predicted to work with: Rat  |
| Immunogen | Synthetic peptide corresponding to Human SHANK2 aa 331-380. NCBI Accession No. NP_036441.2 Sequence: NTALHICALYNQDSCARVLLFRGGNKELKNYNSQTPFQ VAIIAGNFELA Database link: Q9UPX8-3  Run BLAST with  Run BLAST with |
| Positive control | Human intestine tissue and mouse RAW 264.7, Jurkat, HepG2 and COLO 205 cell lysates |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 0.87% Sodium chloride, 50% Glycerol PBS without Mg ²⁺ , Ca ²⁺ |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Applications

Our [Abpromise guarantee](#) covers the use of **ab189398** in the following tested applications.

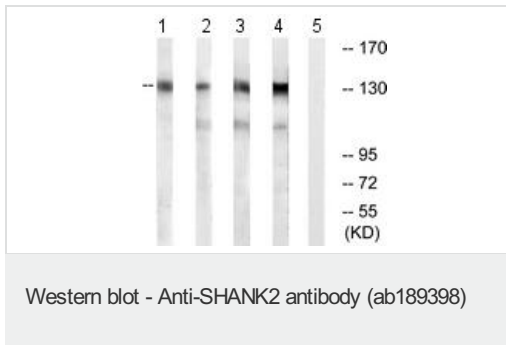
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|--|
| IHC-P | | Use a concentration of 20 µg/ml. |
| WB | | 1/500 - 1/1000. Predicted molecular weight: 201 kDa. |

Target

| | |
|------------------------------|---|
| 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. |
| Tissue specificity | Expressed in epithelial cells (at protein level). All isoforms except isoform 7 are expressed predominantly in brain, with highest levels in olfactory bulb, cerebral cortex, cerebellum, central gray matter and hippocampus. Moderate levels of expression are seen in the caudate putamen, thalamic nuclei and brain stem. In cerebellum primarily expressed in Purkinje cells. Isoform 7 is not expressed in brain but expressed in liver, cholangiocytes and thymus. Isoform 7 is present in pancreas, colonic mucosa and thymocytes (at protein level). |
| Sequence similarities | Belongs to the SHANK family. Contains 1 PDZ (DHR) domain. Contains 1 SAM (sterile alpha motif) domain. Contains 1 SH3 domain. |
| Developmental stage | Expressed during early postnatal brain development, especially in the caudate putamen and thalamic nuclei. Expression in the cerebral cortex, the hippocampus and the cerebellum is moderate to high at P5 and shows a stable expression throughout development. Isoforms 1, 2, 4 and 6 are predominantly expressed in cerebellum up to the age of approximately 3 weeks. Isoform 1 expression decreases during development of cortex but slightly increases in cerebellum. |
| Domain | The PDZ domain is required for interaction with GRID2, PLCB3, SLC9A3 and CFTR. |
| Cellular localization | Apical cell membrane. Cytoplasm. Cell junction, synapse. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell projection, growth cone. Cell projection, dendritic spine. Colocalizes with cortactin in growth cones in differentiating hippocampal neurons. Present in the dendritic spines of cerebellar Purkinje cells (By similarity). Colocalizes with cortactin in growth cones in differentiating hippocampal neurons. Colocalized with PDE4D to the apical membrane of colonic crypt cells. |

Images



All lanes : Anti-SHANK2 antibody (ab189398) at 1/500 dilution

Lane 1 : mouse RAW 264.7 cell lysate

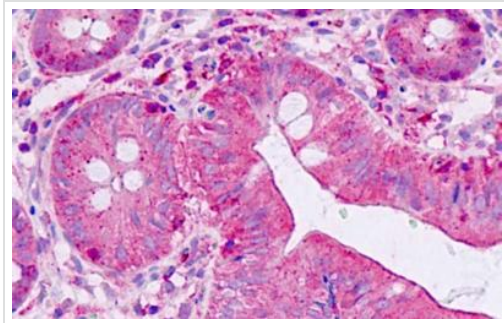
Lane 2 : Jurkat cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : COLO 205 cell lysate

Lane 5 : mouse RAW 264.7 cell lysate with the synthesized peptide

Predicted band size: 201 kDa



Immunohistochemical analysis of formalin-fixed paraffin-embedded Human intestine tissue labeling SHANK2 using ab189398 at 20 µg/ml

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SHANK2 antibody (ab189398)

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