

## **SHANK3 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54747

## **Specification**

## **SHANK3 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession Q9BYB0

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 191338

# **SHANK3 Polyclonal Antibody - Additional Information**

#### Gene ID 85358

#### **Other Names**

SH3 and multiple ankyrin repeat domains protein 3, Shank3, Proline-rich synapse-associated protein 2, ProSAP2, SHANK3, KIAA1650, PROSAP2, PSAP2

## **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_ICC">ICC~~N/A</span><br \> <span class ="dilution\_E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

## **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# **SHANK3 Polyclonal Antibody - Protein Information**

## Name SHANK3

Synonyms KIAA1650, PROSAP2, PSAP2

#### **Function**

Major scaffold postsynaptic density protein which interacts with multiple proteins and complexes to orchestrate the dendritic spine and synapse formation, maturation and maintenance. Interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors via complexes with GKAP/PSD-95 and HOMER, respectively, and the actin-based cytoskeleton. Plays a role in the structural and functional organization of the dendritic spine and synaptic junction through the interaction with Arp2/3 and WAVE1 complex as well as the promotion of the F-actin clusters. By way of this control of actin dynamics, participates in the





regulation of developing neurons growth cone motility and the NMDA receptor-signaling. Also modulates GRIA1 exocytosis and GRM5/MGLUR5 expression and signaling to control the AMPA and metabotropic glutamate receptor-mediated synaptic transmission and plasticity. May be required at an early stage of synapse formation and be inhibited by IGF1 to promote synapse maturation.

#### **Cellular Location**

Cytoplasm. Postsynaptic density. Cell projection, dendritic spine. Note=In neuronal cells, extends into the region subjacent to the postsynaptic density (PSD).

#### **Tissue Location**

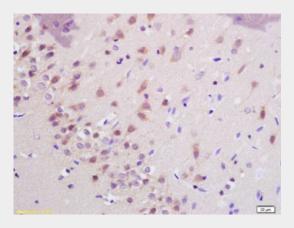
Expressed in the cerebral cortex and the cerebellum

# **SHANK3 Polyclonal Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SHANK3 Polyclonal Antibody - Images



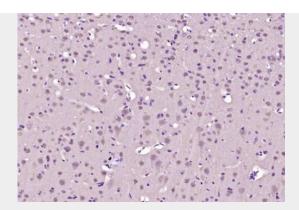
Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-SHANK3 Polyclonal Antibody, Unconjugated(bs-12143R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining







Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SHANK3) Polyclonal Antibody, Unconjugated (bs-12143R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.