

**SHANK3 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54747****Specification**

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**SHANK3 Polyclonal Antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">Q9BYB0</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	184667

**SHANK3 Polyclonal Antibody - Additional Information****Other Names**

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

**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).

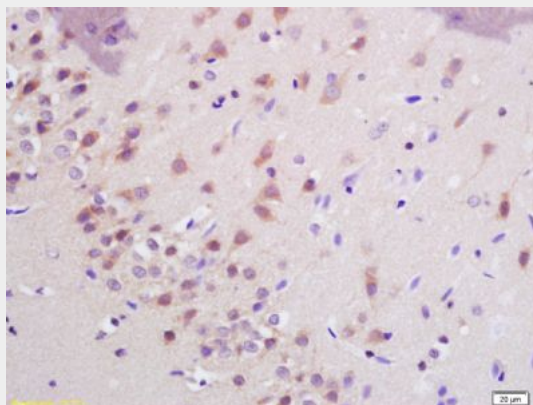
**Tissue Location**

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.

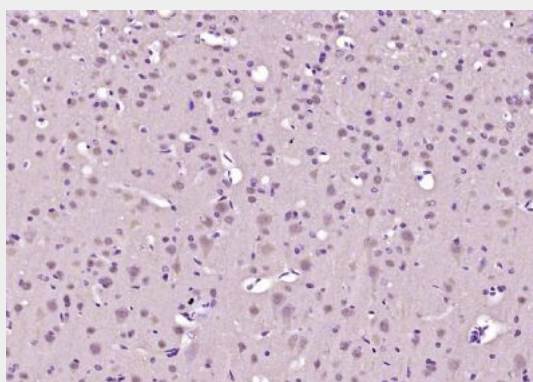
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**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.