## bs-12143R

# [ Primary Antibody ]

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# SHANK3 Rabbit pAb

DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

GenelD: 85358 SWISS: Q9BYB0

Target: SHANK3

Immunogen: KLH conjugated synthetic peptide derived from human SHANK3:

1151-1250/1741.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: SH3 and multiple ankyrin repeat domains 1-3 (Shank1-3) of the Shank/ProSAP family are molecular scaffolds in the postsynaptic density (PSD). The PSD is an electron-dense structure underneath the postsynaptic plasma membrane of excitatory synapses that anchors and clusters glutamate receptors opposite to the presynaptic neurotransmitter release site. Shank proteins contain PDZ modular domains that coordinate the synaptic localization of ion channels, receptors, signaling enzymes, and cell adhesion molecules. The PDZ domain mediates protein-protein interactions via the recognition of a conserved sequence motif at the Cterminus of their target protein(s). Shank recruits betaPIX and PAK to spines to regulate postsynaptic structure and interacts with NMDA receptor and metabotropic glutamate receptor complexes. Transcript splice variation in the Shank family influences the spectrum of Shank-interacting proteins in the PSDs of adult and developing brain to ensure normal development.

Applications: IHC-P (1:100-500)

IHC-F (1:100-500) **IF** (1:100-500)

Reactivity: Rat (predicted: Human,

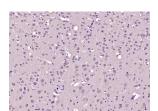
Mouse, Pig, Cow, Dog,

Horse)

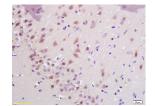
**Predicted** 186 kDa MW.:

**Subcellular Location:** Cell membrane ,Cytoplasm

### **VALIDATION IMAGES**



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  $4^{\circ}\text{C},$  followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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

## - SELECTED CITATIONS -

• [IF=11.8] Mingdan You. et al. Exposure to Nonylphenol in Early Life Causes Behavioural Deficits Related with Autism Spectrum Disorders in Rats. ENVIRON INT. 2023 Sep;:108228 IF; Rat. 37802007

- [IF=3.9] Wang Yuan. et al. Exploring the nucleus accumbens circuit and oxytocin therapy in a Sapap3 knockout mouse model of trichotillomania. SCI REP-UK. 2025 Aug;15(1):1-12 IF; Mouse. 40764792
- [IF=3.052] Burcu Acikgoz. et al. Gender differences in effects of prenatal and postnatal exposure to electromagnetic field and prenatal zinc on behaviour and synaptic proteins in rats. J Chem Neuroanat. 2022 Jul;122:102092 IHC;Rat. 35364275
- [IF=2.948] Nevin Ersoy. et al. The Effects of Prenatal and Postnatal Exposure to 50-Hz and 3 mT Electromagnetic Field on Rat Testicular Development. MED LITH. 2023 Jan;59(1):71 IHC; Rat. 36676695