

富含脯氨酸突触相关蛋白 SHANK1 抗体

产品货号: mIR0211

英文名称: SHANK 1

中文名称: 富含脯氨酸突触相关蛋白 SHANK1 抗体

别 名: GKAP/SAPAP interacting protein; SH3 and multiple ankyrin repeat domains 1; SH3 and multiple ankyrin repeat domains protein 1; SHANK-1; Somatostatin receptor interacting protein; Somatostatin receptor-interacting protein; SH3 and multiple ankyrin repeat domains protein 1; SPANK 1; SSTR-interacting protein; Shank1; SPANK1; SSTR interacting protein; SSTRIP; SHAN1_HUMAN; Synamon.

研究领域: 神经生物学 信号转导

抗体来源: Rabbit

克隆类型: Polyclonal

交叉反应: Human, Mouse, Rat,

产品应用: WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (石蜡切片需

做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量: 225kDa

细胞定位: 细胞膜

性 状: Lyophilized or Liquid

浓 度: 1mg/ml

免疫原: KLH conjugated synthetic peptide derived from human Shank1:101-200/2161



亚 型: lgG

纯化方法: affinity purified by Protein A

储存液: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件: Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 $^{\circ}$ C. 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 $^{\circ}$ C.

PubMed: PubMed

产品介绍: The mechanisms underlying the molecular assemblage of molecules at the synapse are not well understood. Recently, a number of novel anchoring/scaffold proteins that are associated with postsynaptic density (PSD) proteins have been isolated. SHANK1, SHANK2 and SHANK3 constitute a family of proteins that may function as molecular scaffolds in the PSD. SHANK is made of five domain/regions that are probably involved in protein-protein interactions: ankyrin repeats, an SH3 domain, a PDZ domain, a SAM domain, and a proline rich region. SHANK interacts directly with GKAP or SAPAP via its PDZ domain, thus potentially bridging the N-methyl-D-aspartate receptor (NMDA)-PSD-95-GKAP complex.

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 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.

Subunit:

May homomultimerize via its SAM domain (By similarity). Interacts with the C-terminus of SSTR2 via the PDZ domain. Interacts with IGSF9, SHARPIN, SPTAN1, HOMER1 and DLGAP1/GKAP isoforms 1 and 2 (By similarity). Part of a complex with DLG4/PSD-95 and DLGAP1/GKAP (By similarity). Interacts with BAIAP2.



Subcellular Location:

May homomultimerize via its SAM domain (By similarity). Interacts with the C-terminus of SSTR2 via the PDZ domain. Interacts with IGSF9, SHARPIN, SPTAN1, HOMER1 and DLGAP1/GKAP isoforms 1 and 2 (By similarity). Part of a complex with DLG4/PSD-95 and DLGAP1/GKAP (By similarity). Interacts with BAIAP2.

Tissue Specificity:

Expressed in brain particularly in the amygdala, hippocampus, substantia nigra and thalamus. Isoform 2 seems to

be expressed ubiquitously. Similarity: Belongs to the SHANK family. Contains 6 ANK repeats. Contains 1 PDZ (DHR) domain. Contains 1 SAM (sterile alpha motif) domain. Contains 1 SH3 domain. **SWISS:**

Q9Y566

Gene ID:

50944

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

