

STXBP1/Munc18-1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58113

Specification

STXBP1/Munc18-1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A	WB, IHC-P, IHC-F, IF, E <u>P61764</u> Rat, Pig, Dog Rabbit Polyclonal 68 KDa Liquid KLH conjugated synthetic peptide derived from human Munc18 11-110/594 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Membrane; Peripheral membrane protein.
SIMILARITY	Belongs to the STXBP/unc-18/SEC1 family.
SUBUNIT	Binds SYTL4. Interacts with STX1A.
DISEASE	Defects in STXBP1 are the cause of epileptic encephalopathy early infantile type 4 (EIEE4) [MIM:612164]. Affected individuals have neonatal or infantile onset of seizures, suppression-burst pattern on EEG, profound mental retardation, and MRI evidence of hypomyelination.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

This gene encodes a syntaxin-binding protein. The encoded protein appears to play a role in release of neurotransmitters via regulation of syntaxin, a transmembrane attachment protein receptor. Mutations in this gene have been associated with infantile epileptic encephalopathy-4. Alternatively spliced transcript variants have been described. [provided by RefSeq, Feb 2010]

STXBP1/Munc18-1 Polyclonal Antibody - Additional Information

Gene ID 6812

Other Names Syntaxin-binding protein 1, MUNC18-1, N-Sec1, Protein unc-18 homolog 1, Unc18-1, Protein unc-18 homolog A, Unc-18A, p67, STXBP1, UNC18A



Target/Specificity

Brain and spinal cord. Highly enriched in axons.

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

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.

STXBP1/Munc18-1 Polyclonal Antibody - Protein Information

Name STXBP1

Synonyms UNC18A

Function

Participates in the regulation of synaptic vesicle docking and fusion through interaction with GTP-binding proteins (By similarity). Essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 ratio. Can interact with syntaxins 1, 2, and 3 but not syntaxin 4. Involved in the release of neurotransmitters from neurons through interacting with SNARE complex component STX1A and mediating the assembly of the SNARE complex at synaptic membranes (By similarity). May play a role in determining the specificity of intracellular fusion reactions.

Cellular Location

Cytoplasm, cytosol. Membrane; Peripheral membrane protein

Tissue Location Brain and spinal cord. Highly enriched in axons.

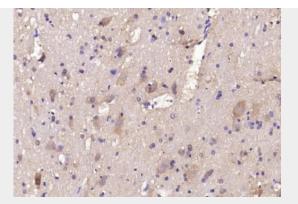
STXBP1/Munc18-1 Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

STXBP1/Munc18-1 Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (rat spinal cord); 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 (STXBP1 Munc18-1) Polyclonal Antibody, Unconjugated (bs-3954R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.