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# STXBP1/Munc18-1 Rabbit pAb

STXBP1/Munc18-1 Rabbit pAb
Catalog # AP58113

## Product Information

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|---|---|
| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | P61764 |
| **Reactivity** | Rat |
| **Predicted** | Human, Mouse, Chicken, Dog, Pig, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 67569 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human Munc18 |
| **Epitope Specificity** | 11-110/594 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **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] |

## Additional Information

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| **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** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **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.

## Protein Information

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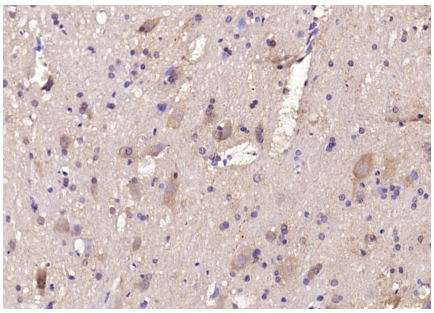
| **Name** | STXBP1 |
| **Synonyms** | UNC18A |
| **Function** | Participates in the regulation of synaptic vesicle docking and fusion through interaction with GTP-binding proteins (By similarity). Essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery 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. |

## Background

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]

## 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 (AP58113) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.