

STXBP1/Munc18-1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58113

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P61764
Reactivity	Rat, Pig, Dog
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

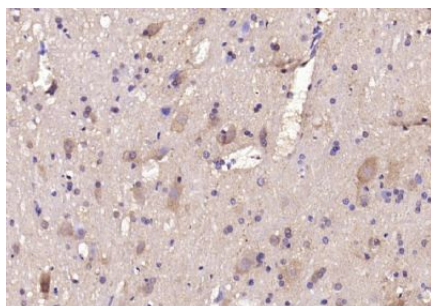
Gene ID	6812
Other Names	Syntaxin-binding protein 1, MUNC18-1, N-Sec1, Protein unc-18 homolog 1, Unc18-1, Protein unc-18 homolog A, Unc-18A, p67, STXBP1, UNC18A
Target/Specificity	Brain and spinal cord. Highly enriched in axons.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

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.

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) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.