

STX1A Antibody
Rabbit mAb
Catalog # AP92541

Specification

STX1A Antibody - Product Information

Application	WB, FC, IP
Primary Accession	O16623
Reactivity	Rat
Clonality	Monoclonal
Other Names	
HPC 1; P35-1; STX1; STX1A; SYN1A; Syntaxin-1A;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33023 Da

STX1A Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human STX1A
Description	Potentially involved in docking of synaptic vesicles at presynaptic active zones. May play a critical role in neurotransmitter exocytosis. May mediate Ca(2+)-regulation of exocytosis acrosomal reaction in sperm. Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage Condition and Buffer	

STX1A Antibody - Protein Information

Name STX1A

Synonyms STX1

Function

Plays an essential role in hormone and neurotransmitter calcium-dependent exocytosis and endocytosis (PubMed:26635000). Part of the SNARE (Soluble NSF Attachment Receptor) complex composed of SNAP25, STX1A and VAMP2 which mediates the fusion of synaptic vesicles with the presynaptic plasma membrane. STX1A and SNAP25 are localized on the plasma membrane while VAMP2 resides in synaptic vesicles. The pairing of the three SNAREs from the N-terminal SNARE motifs to the C-terminal anchors leads to the formation of the SNARE complex, which brings membranes into close proximity and results in final fusion. Participates in the calcium-dependent regulation of acrosomal exocytosis in sperm (PubMed:<a

<http://www.uniprot.org/citations/23091057> (23091057). Also plays an important role in the exocytosis of hormones such as insulin or glucagon-like peptide 1 (GLP-1) (By similarity).

Cellular Location

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:O35526}; Single-pass type IV membrane protein {ECO:0000250|UniProtKB:O35526}. Synapse, synaptosome {ECO:0000250|UniProtKB:O35526}. Cell membrane {ECO:0000250|UniProtKB:P32851}. Note=Colocalizes with KCNB1 at the cell membrane. {ECO:0000250|UniProtKB:P32851}

Tissue Location

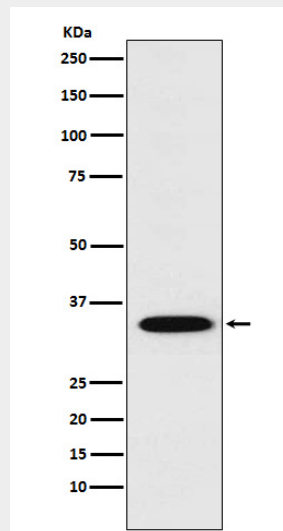
[Isoform 1]: Highly expressed in embryonic spinal cord and ganglia and in adult cerebellum and cerebral cortex

STX1A Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

STX1A Antibody - Images



Western blot analysis of STX1A expression in SH-SY5Y cell lysate.