

Syntaxin 1A Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53323

Specification

Syntaxin 1A Antibody - Product Information

Application	WB
Primary Accession	Q16623
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33 KDa
Antigen Region	42-91

Syntaxin 1A Antibody - Additional Information

Gene ID 6804

Other Names

Syntaxin-1A, Neuron-specific antigen HPC-1, STX1A, STX1

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Syntaxin 1A Antibody - Protein Information

Name STX1A

Synonyms STX1

Function

Plays an essential role in hormone and neurotransmitter calcium-dependent exocytosis and endocytosis (PubMed: <http://www.uniprot.org/citations/26635000> target="_blank">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: <http://www.uniprot.org/citations/23091057> target="_blank">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

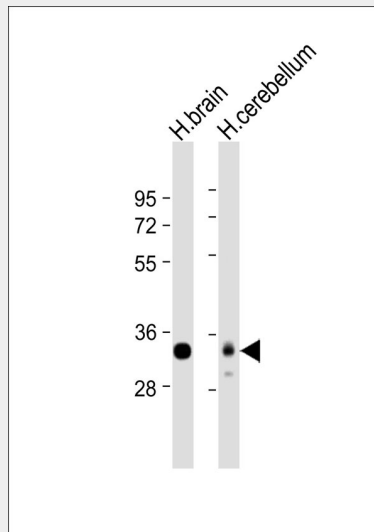
[Isoform 1]: Highly expressed in embryonic spinal cord and ganglia and in adult cerebellum and cerebral cortex

Syntaxin 1A 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](#)

Syntaxin 1A Antibody - Images



All lanes : Anti-Syntaxin 1A Antibody at 1:1000 dilution Lane 1: human brain lysate Lane 2: human cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

Syntaxin 1A Antibody - Background

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.

Syntaxin 1A Antibody - References

- Zhang R.-D.,et al.Gene 159:293-294(1995).
Osborne L.R.,et al.Am. J. Hum. Genet. 61:449-452(1997).
Wu Y.-Q.,et al.Am. J. Med. Genet. 109:121-124(2002).
Jagadish M.N.,et al.Biochem. J. 321:151-156(1997).
Nakayama T.,et al.Genomics 42:173-176(1997).