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STX1A antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16216

Specification

STX1A antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q16623
Other Accession	NM_004603, NP_004594
Reactivity	**Human, Mouse, Rat, Pig, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Pig, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

STX1A antibody - N-terminal region - Additional Information

Gene ID 6804

Alias Symbol	**HPC-1, STX1, p35-1, P35-1, SYN1A**

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

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-STX1A antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
STX1A antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

STX1A antibody - N-terminal region - 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: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}

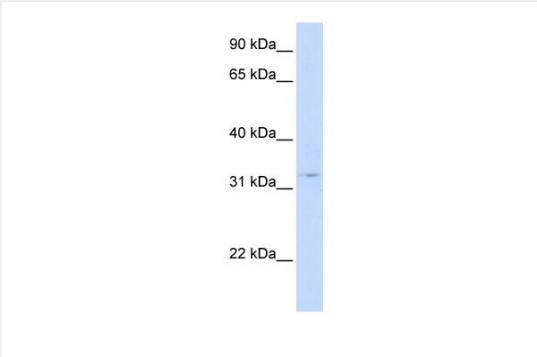
Tissue Location
[Isoform 1]: Highly expressed in embryonic spinal cord and ganglia and in adult cerebellum and cerebral cortex

STX1A antibody - N-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

STX1A antibody - N-terminal region - Images



WB Suggested Anti-STX1A Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: 721_B cell lysate

STX1A antibody - N-terminal region - 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.

STX1A antibody - N-terminal region - 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).