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STX1A antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI16216

Product Information

Application	WB
Primary Accession	Q16623
Other Accession	NM_004603, NP_004594
Reactivity	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Bovine
Predicted	Human, Mouse, Rat, Pig, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33023

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.

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

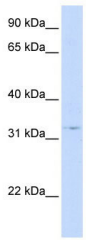
Background

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.

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).

Images



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