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Anti-Syntaxin 1A Antibody

Catalog # AP53323

Product Information

Application	WB, IHC
Primary Accession	Q16623
Reactivity	Human, Mouse, Rat, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33023

Additional Information

Gene ID	6804
Other Names	STX1; Syntaxin-1A; Neuron-specific antigen HPC-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Syntaxin 1A. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

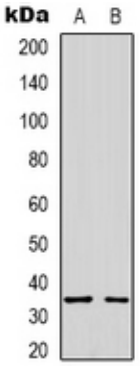
Name	STX1A
Synonyms	STX1
Function	Plays an essential role in hormone and neurotransmitter calcium-dependent exocytosis and endocytosis (PubMed:26635000). Part of the SNARE (Soluble NSF Attachment Receptor) complex composed of SNAP25, STX1A and VAMP2 which mediates the fusion of synaptic vesicles with 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

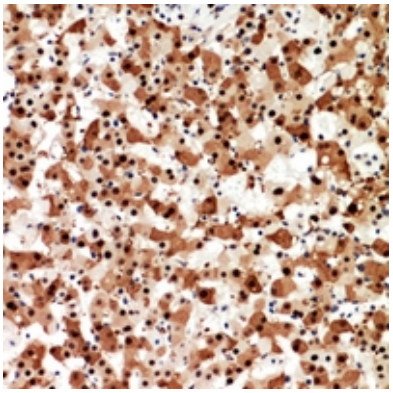
References

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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



Western blot analysis of Syntaxin 1A expression in A431 (A), K562 (B) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 35 kD)



Immunohistochemical analysis of Syntaxin 1A staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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