

Syntaxin 1 (phospho Ser14) Polyclonal Antibody

Catalog # AP67501

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q16623
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33023

Additional Information

Gene ID	6804
Other Names	STX1A; STX1; Syntaxin-1A; Neuron-specific antigen HPC-1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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}

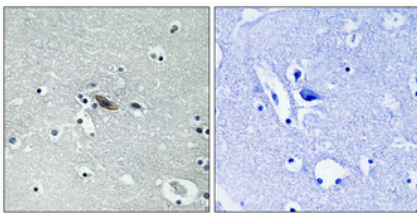
Tissue Location

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

Background

Plays a role in hormone and neurotransmitter exocytosis (By similarity). Potentially involved in docking of synaptic vesicles at presynaptic active zones. May mediate Ca(2+)- regulation of exocytosis acrosomal reaction in sperm.

Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°, overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

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