

Syntaxin 1 Polyclonal Antibody

Catalog # AP72676

Product Information

Application WB, IHC-P, IF, ICC, E

Primary Accession <u>Q16623</u>

Reactivity Human, Mouse, Rat, Monkey

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: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A

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}

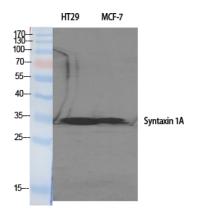
Tissue Location

[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



Western Blot analysis of various cells using Syntaxin 1 Polyclonal Antibody

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