

# Syntaxin 1 (phospho Ser14) Polyclonal Antibody

**Catalog # AP67501** 

## **Specification**

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host WB, IHC-P, IF
O16623
Human, Mouse, Rat
Rabbit
Polyclonal

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody - Additional Information

**Gene ID** 6804

**Other Names** 

STX1A; STX1; Syntaxin-1A; Neuron-specific antigen HPC-1

Dilution

Clonality

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

# Syntaxin 1 (phospho Ser14) Polyclonal Antibody - Protein Information

Name STX1A

Synonyms STX1

## **Function**

Plays an essential role in hormone and neurotransmitter calcium-dependent exocytosis and endocytosis (PubMed:<a href="http://www.uniprot.org/citations/26635000" target="\_blank">26635000</a>). 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:<a

href="http://www.uniprot.org/citations/23091057" target="\_blank">23091057</a>). 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**

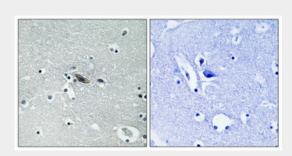
[Isoform 1]: Highly expressed in embryonic spinal cord and ganglia and in adult cerebellum and cerebral cortex

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody - 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

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody - 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. Negetive contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody - 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.