

## Syntaxin 1 (phospho Ser14) Polyclonal Antibody

<b>Catalog No :</b>	YP0569
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Syntaxin 1
<b>Fields :</b>	>>SNARE interactions in vesicular transport;>>Synaptic vesicle cycle;>>Insulin secretion;>>Huntington disease;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction
<b>Gene Name :</b>	STX1A
<b>Protein Name :</b>	Syntaxin-1A
<b>Human Gene Id :</b>	6804
<b>Human Swiss Prot No :</b>	Q16623
<b>Mouse Gene Id :</b>	20907
<b>Mouse Swiss Prot No :</b>	O35526
<b>Rat Gene Id :</b>	116470
<b>Rat Swiss Prot No :</b>	P32851
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Syntaxin 1A around the phosphorylation site of Ser14. AA range:1-50
<b>Specificity :</b>	Phospho-Syntaxin 1 (S14) Polyclonal Antibody detects endogenous levels of Syntaxin 1 protein only when phosphorylated at S14.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 35kD

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**Cell Pathway :** SNARE interactions in vesicular transport;

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**Background :** This gene encodes a member of the syntaxin superfamily. Syntaxins are nervous system-specific proteins implicated in the docking of synaptic vesicles with the presynaptic plasma membrane. Syntaxins possess a single C-terminal transmembrane domain, a SNARE [Soluble NSF (N-ethylmaleimide-sensitive fusion protein)-Attachment protein REceptor] domain (known as H3), and an N-terminal regulatory domain (Habc). Syntaxins bind synaptotagmin in a calcium-dependent fashion and interact with voltage dependent calcium and potassium channels via the C-terminal H3 domain. This gene product is a key molecule in ion channel regulation and synaptic exocytosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009],

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**Function :** disease:Haploinsufficiency of STX1A may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7q11.23.,function:Potentially involved in docking of synaptic vesicles at presynaptic active zones. May play a critical role in neurotransmitter exocytosis.,similarity:Belongs to the syntaxin family.,similarity:Contains 1 t-SNARE coiled-coil homology domain.,subunit:Part of the SNARE core complex containing SNAP25, VAMP2 and STX1A. This complex binds to CPLX1. Binds SYTL4 and STXBP6. Found in a ternary complex with STX1A and SNAP25. Interacts with OTOF (By similarity). Found in a complex with VAMP8 and SNAP23. Interacts with VAPA and SYBU.,tissue specificity:Isoform 1 is highly expressed in embryonic spinal cord and ganglia

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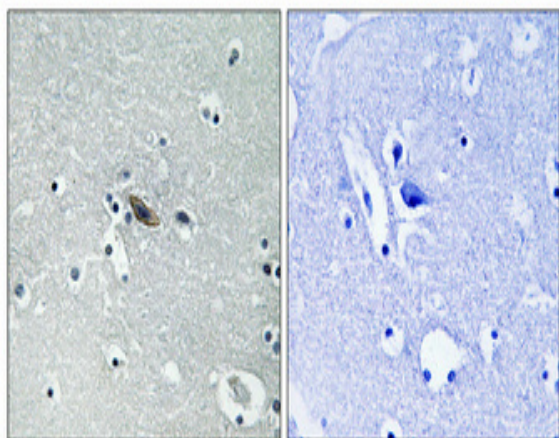
**Subcellular Location :** Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass type IV membrane protein . Cell junction, synapse, synaptosome . Cell membrane . Colocalizes with KCNB1 at the cell membrane. .; [Isoform 2]: Secreted .

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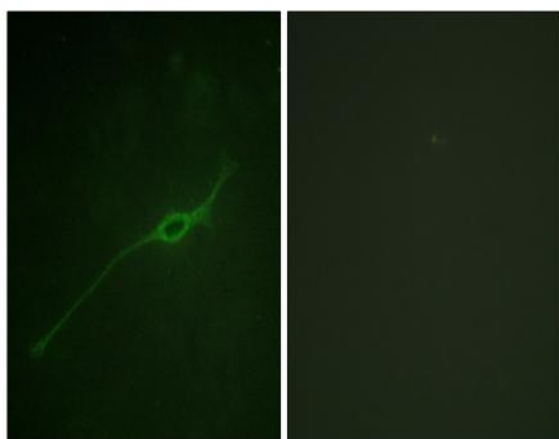
**Expression :** [Isoform 1]: Highly expressed in embryonic spinal cord and ganglia and in adult cerebellum and cerebral cortex. ; [Isoform 2]: Expressed in heart, liver, fat, skeletal muscle, kidney and brain.

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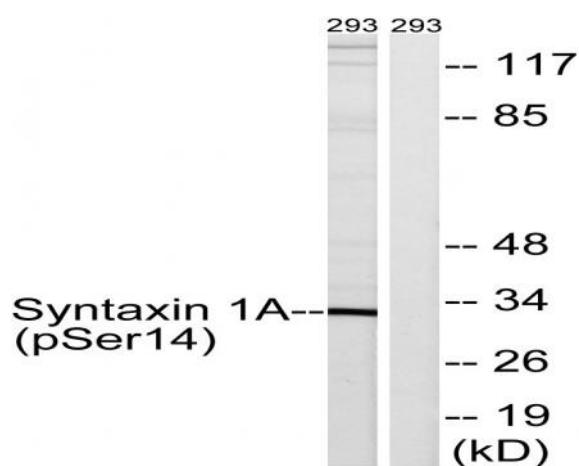
## Products Images



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 contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunofluorescence analysis of NIH/3T3 cells, using Syntaxin 1A (Phospho-Ser14) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells, using Syntaxin 1A (Phospho-Ser14) Antibody. The lane on the right is blocked with the phospho peptide.