



# Syntaxin 1 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-00747
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB
<b>Gene Name</b>	STX1A
<b>Protein Name</b>	Syntaxin-1A
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Syntaxin 1A. AA range:1-50
<b>Specificity</b>	Syntaxin 1 Monoclonal Antibody detects endogenous levels of Syntaxin 1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	STX1A; STX1; Syntaxin-1A; Neuron-specific antigen HPC-1
<b>Observed Band</b>	35kD
<b>Cell Pathway</b>	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 .
<b>Tissue Specificity</b>	[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.
<b>Function</b>	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 chord and ganglia



## 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],

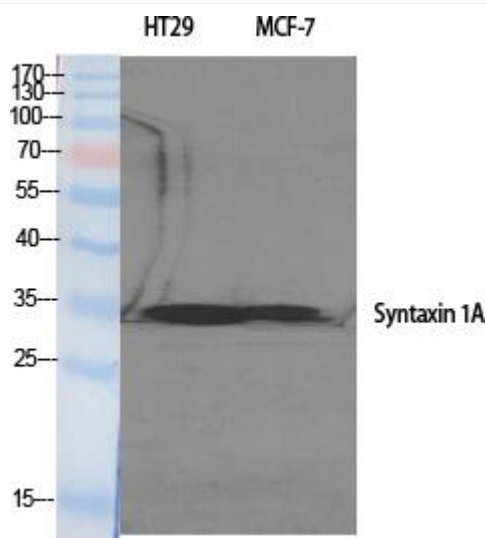
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using Syntaxin 1 Monoclonal Antibody