Best Tools for immunology Research

# Syntaxin 1 Polyclonal Antibody

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|---|---|
| **Catalog No :** | YT4493 |
| **Reactivity :** | Human;Mouse;Rat;Monkey |
| **Applications :** | WB;IHC;IF;ELISA |
| **Target :** | Syntaxin 1 |
| **Fields :** | >>SNARE interactions in vesicular transport;>>Synaptic vesicle cycle;>>Insulin secretion;>>Huntington disease;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction |
| **Gene Name :** | STX1A |
| **Protein Name :** | Syntaxin-1A |
| **Human Gene Id :** | 6804 |
| **Human Swiss Prot No :** | Q16623 |
| **Mouse Gene Id :** | 20907 |
| **Mouse Swiss Prot No :** | O35526 |
| **Rat Gene Id :** | 116470 |
| **Rat Swiss Prot No :** | P32851 |
| **Immunogen :** | The antiserum was produced against synthesized peptide derived from human Syntaxin 1A. AA range:1-50 |
| **Specificity :** | Syntaxin 1 Polyclonal Antibody detects endogenous levels of Syntaxin 1 protein. |
| **Formulation :** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source :** | Polyclonal, Rabbit,IgG |
| **Dilution :** | WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not |

yet tested in other applications.

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

**Concentration :** 1 mg/ml

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

**Observed Band :** 35kD

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

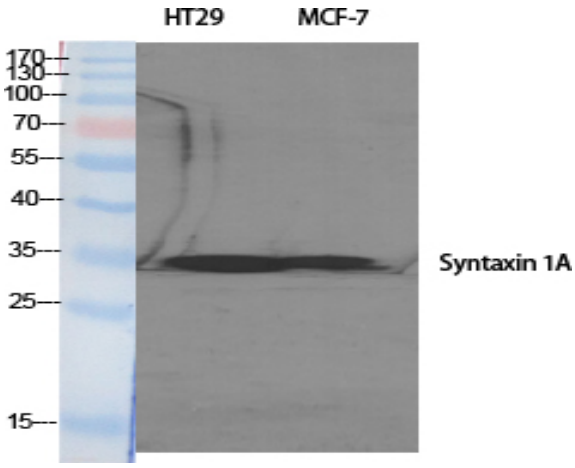
**Background :** This gene encodes a member of the syntaxin superfamily. Syntaxins are nervous system-specific proteins implicated in the docking of synaptic vesicles with the presynaptic plasma membrane. Syntaxins possess a single C-terminal transmembrane domain, a SNARE [Soluble NSF (N-ethylmaleimide-sensitive 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],

**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 chord and ganglia

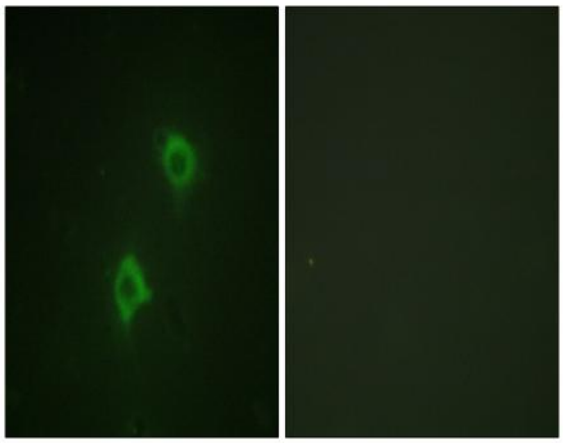
**Subcellular Location :** Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass type IV membrane protein . Cell junction, synapse, synaptosome . Cell membrane . Colocalizes with KCNB1 at the cell membrane. .; [Isoform 2]: Secreted .

**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.

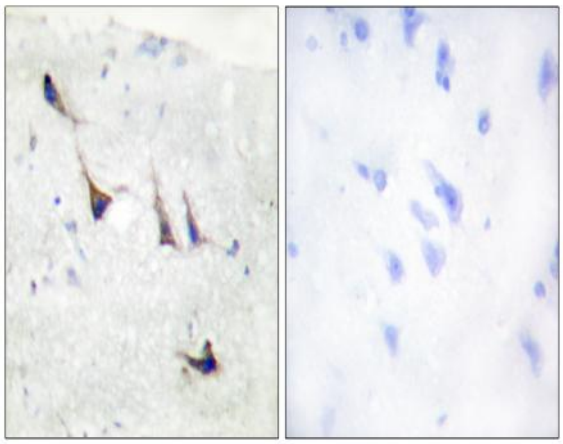
# Products Images



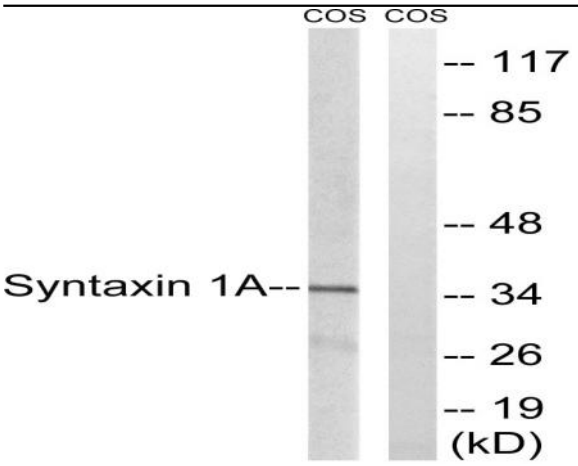

Western Blot analysis of various cells using Syntaxin 1 Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using Syntaxin 1A Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Syntaxin 1A Antibody. The picture on the right is blocked with the synthesized peptide.




Western blot analysis of lysates from COS7 cells, using Syntaxin 1A Antibody. The lane on the right is blocked with the synthesized peptide.