Immunoway
Best Tools for immunology Research

Syntaxin 1 Polyclonal Antibody

Catalog No :	YT5440
Reactivity :	Human;Mouse;Rat
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 the Internal region of human STX1A. AA range:31-80
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. ELISA: 1:20000.. IF 1:50-200

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 : 30kD

Cell Pathway : SNARE interactions in vesicular transport;

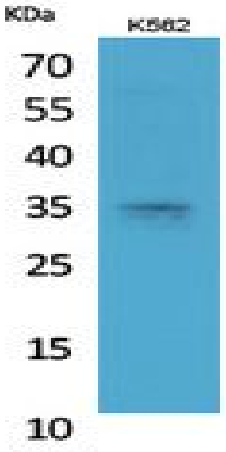
Background : This gene encodes a member of the syntaxin superfamily. Syntaxins are nervous system-specific proteins implicated in the docking of synaptic vesicles with the presynaptic plasma membrane. Syntaxins possess a single C-terminal transmembrane domain, a SNARE [Soluble NSF (N-ethylmaleimide-sensitive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

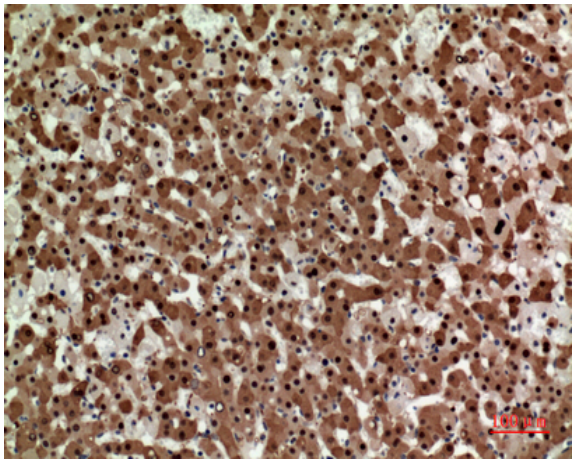
Subcellular Location : Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass type IV membrane protein . Cell junction, synapse, synaptosome . Cell membrane . Colocalizes with KCNB1 at the cell membrane. .; [Isoform 2]: Secreted .

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 K562 cells using Syntaxin 1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100