

Product datasheet for **CF812826**

Syntaxin 1a (STX1A) Mouse Monoclonal Antibody [Clone ID: OTI2D11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2D11
Applications:	IF, WB
Recommended Dilution:	WB 1:500, IF 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human STX1A (NP_004594) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	Homo sapiens syntaxin 1A (STX1A), transcript variant 1, mRNA.
Database Link:	NP_004594 Entrez Gene 20907 Mouse Entrez Gene 116470 Rat Entrez Gene 6804 Human Q16623



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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]

Synonyms:

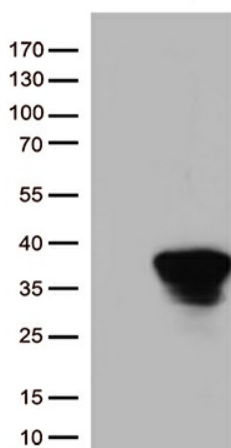
HPC-1; P35-1; STX1; SYN1A

Protein Families:

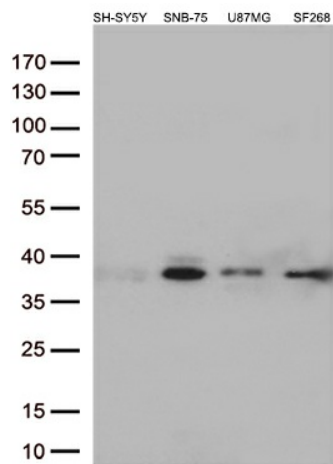
Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways:

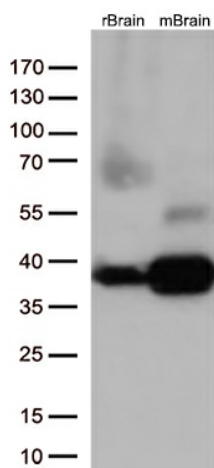
SNARE interactions in vesicular transport

Product images:

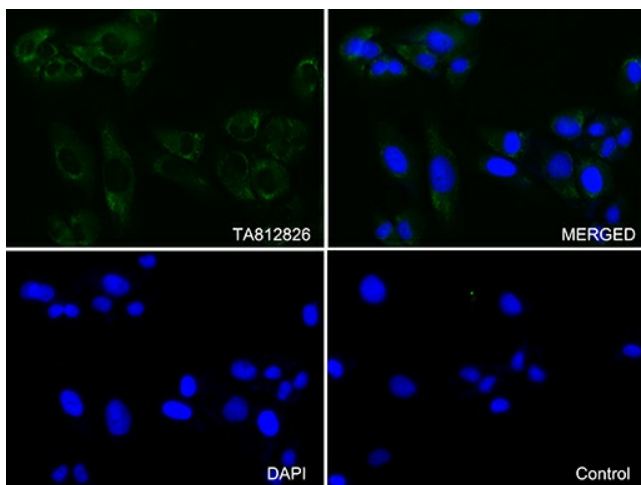
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STX1A (Cat# [RC209062], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STX1A (Cat# [TA812826])(1:500).



Western blot analysis of extracts (35ug) from 4 different cell lines by using anti-STX1A monoclonal antibody (1:500).



Western blot analysis of extracts (35ug) from 2 different tissue lysates by using anti-STX1A monoclonal antibody (1:500).



Immunofluorescent staining of SF-268 cells using anti-STX1A antibody ([TA812826]/green, upper left; DAPI/blue, lower left; MERGED, upper right) or Isotype control (MERGED, lower right) (1:100).