

## Product datasheet for **TP503927**

### Stx1a (NM\_016801) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse syntaxin 1A (brain) (Stx1a), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR203927 representing NM_016801 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MKDRTQELRTAKDSDDDDVTVTVD RDRFMDEFFEQVEEIRGFIDKIAENVEEVKRRKHSAILASPNPDEK  
TKEELEELMSDIKKTANKVRSKLSIEQIEQEEGLNRSSADLRIRKQHQSTLSRKFVEVMSEYNATQSD  
YRERCKGRIQRQLEITGRITTTSEELEDMLESGNPAIFASGIIMDSSISKQALSEIETRHSIIEKLETSIR  
ELHDMFMDMAMLVESQGEMIDRIEYNVEHAVDYVERAVSDTKKAVKYQSKARRKKIMIIICCVILGIIIA  
STIGGIFG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	33.5 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_058081</a>
Locus ID:	20907
UniProt ID:	<a href="#">O35526</a> , <a href="#">Q497P1</a> , <a href="#">Q5D0A4</a>



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RefSeq Size: 2071

Cytogenetics: 5 G2

RefSeq ORF: 864

Synonyms: HPC-1

**Summary:** Plays an essential role in hormone and neurotransmitter calcium-dependent exocytosis and endocytosis (PubMed:17502420, PubMed:28596237, PubMed:28031464). Part of the SNARE (Soluble NSF Attachment Receptor) complex composed of SNAP25, STX1A and VAMP2 which mediates the fusion of synaptic vesicles with the presynaptic plasma membrane. STX1A and SNAP25 are localized on the plasma membrane while VAMP2 resides in synaptic vesicles. The pairing of the three SNAREs from the N-terminal SNARE motifs to the C-terminal anchors leads to the formation of the SNARE complex, which brings membranes into close proximity and results in final fusion. Participates in the calcium-dependent regulation of acrosomal exocytosis in sperm (PubMed:12101244). Plays also an important role in the exocytosis of hormones such as insulin or glucagon-like peptide 1 (GLP-1) (PubMed:17502420, PubMed:28596237, PubMed:28031464).[UniProtKB/Swiss-Prot Function]