

## Product datasheet for **RC228784**

### Syntaxin 1a (STX1A) (NM\_001165903) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Syntaxin 1a (STX1A) (NM_001165903) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Syntaxin 1a
Synonyms:	HPC-1; P35-1; STX1; SYN1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228784 representing NM_001165903 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGACCGAACCAGGAGCTCCGCACGGCCAAGGACAGCGATGATGATGATGATGTCGCTGTACCG  
TGGACCGAGACCGCTTCATGGATGAGTTCTTTGAGCAGGTGGAGGAGATTCGAGGCTTCATTGACAAGAT  
CGCAGAGAACGTGGAGGAGGTGAAGCGGAAGCACAGTGCCATCCTGGCATCCCCAACCCGACGAGAAG  
ACGAAGGAGGAGCTGGAAGAACTCATGTCCGACATAAAGAAGACAGCAAACAAAGTTCGTTCCAAGTTAA  
AGAGCATCGAGCAGTCCATCGAGCAAGAGGAAGGCCTGAACCGCTCCTCCGCTGACCTGAGGATCCGGAA  
GACACAGCACTCCACGCTGTCCAGAAAGTTTGTGGAGGTGATGTCGGAGTACAACGCCACGAGTCCGAC  
TACCGCGAGCGCTGCAAAGGCCGATCCAGAGGCACTGGAGATCACCGCAGGACCACGACCAAGTGGAGG  
AGCTGGAGGACATGCTGGAGAGTGGGAACCCCGCCATCTTTGCCTCTGGGATCATCATGGACTCCAGCAT  
CTCGAAGCAGGCTCTGAGCGAGATTGAGACGCGGCACAGTGAGATCATCAAGCTGGAGAACAGCATCCGT  
GAGCTACACGACATGTTTCATGGACATGGCCATGCTCGTGGAGAGCCAGACTATGTGGAGAGGGCCGTGTC  
TGACACCAAGAAGGCCGTC AAGTACCAGAGCAAGGCGCGCCGGAAGAAAATCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC228784 representing NM\_001165903  
Red=Cloning site Green=Tags(s)

MKDRTQELRTAKSDDDDDVAVTVDRDRFMDEFQVEEIRGFIDKIAENVVEVKRKHSAILASPNPDEK  
 TKEELEELMSDIKKTANKVRSKLSIEQSIQEGLNRSSADLRIRKTHSTLSRKFVEVMSEYNATQSD  
 YRERCKGRIQRQLEITGRITTTSEELEDMLESGNPAIFASGIIMDSISKQALSEIETRHSEIIKLENSIR  
 ELHDMFMMDMAMLVESQTMWRGPCLTPRRPSSTRARRAGRKS

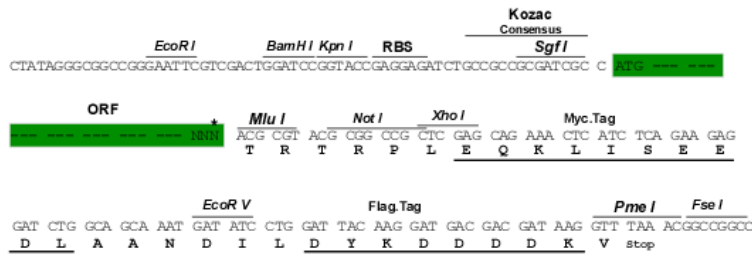
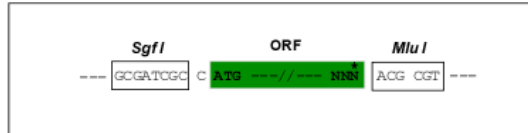
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4453\\_f09.zip](https://cdn.origene.com/chromatograms/mg4453_f09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001165903

**ORF Size:** 753 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001165903.1](#), [NP\\_001159375.1](#)

**RefSeq ORF:** 756 bp

**Locus ID:** 6804

**UniProt ID:** [Q16623](#)

**Cytogenetics:** 7q11.23

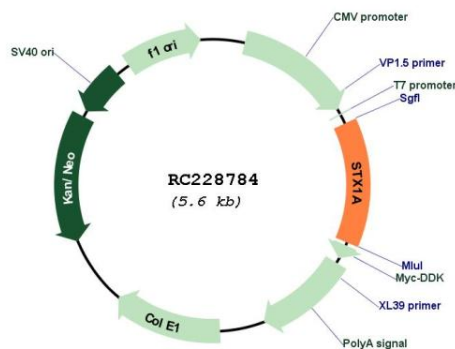
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Protein Pathways:** SNARE interactions in vesicular transport

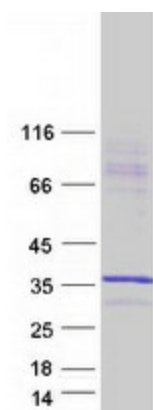
**MW:** 28.8 kDa

**Gene Summary:** 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]

### Product images:



Circular map for RC228784



Coomassie blue staining of purified STX1A protein (Cat# [TP328784]). The protein was produced from HEK293T cells transfected with STX1A cDNA clone (Cat# RC228784) using MegaTran 2.0 (Cat# [TT210002]).