

Product datasheet for **SC117260**

Syntaxin 1a (STX1A) (NM_004603) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Syntaxin 1a (STX1A) (NM_004603) Human Untagged Clone
Tag:	Tag Free
Symbol:	Syntaxin 1a
Synonyms:	HPC-1; P35-1; STX1; SYN1A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_004603 edited
 CGGGAGCATGAAGGACCGAACCCAGGAGCTCCGCACGGCCAAGGACAGCGATGATGATGA
 TGATGTCGCTGTACCCTGGACCGAGACCGCTTCATGGATGAGTTCTTTGAGCAGGTGGA
 GGAGATTTCGAGGCTTCATTGACAAGATCGCAGAGAACGTGGAGGAGGTGAAGCGGAAGCA
 CAGTGCCATCCTGGCATCCCCAACCCGACGAGAAGACGAAGGAGGAGCTGGAAGAAGT
 CATGTCCGACATAAAGAAGACAGCAAACAAAGTTCGTTCCAAGTTAAAGAGCATCGAGCA
 GTCCATCGAGCAAGAGGAAGGCCTGAACCGCTCCTCCGCTGACCTGAGGATCCGGAAGAC
 ACAGCACTCCACGCTGTCCAGAAAGTTTGTGGAGGTCATGTCGGAGTACAACGCCACGCA
 GTCCGACTACCGCGAGCGCTGCAAAGGCCGCATCCAGAGGCAGCTGGAGATCACCGGCAG
 GACCACGACCAAGTGGAGGCTGGAGGACATGCTGGAGAGTGGAAACCCCGCCATCTTTGC
 CTCTGGGATCATCATGGACTCCAGCATCTCGAAGCAGGCTCTGAGCGAGATTGAGACGG
 GCACAGTGAGATCATCAAGCTGGAGAACAGCATCCGTGAGCTACACGACATGTTTCATGGA
 CATGGCCATGCTCGTGGAGAGCCAGGGAGAGATGATTGACAGGATCGAGTACAATGTGGA
 ACACGCGGTAGACTATGTGGAGAGGCCGTGTCTGACACCAAGAAGGCCGTCAGTACCA
 GAGCAAGGCGCGCCGGAAGAAAATCATGATCATCATCTGCTGTGTGATCCTGGGCATCGT
 CATCGCCTCCACTGTTGGGGCATCTTCGCCTAGAAGCCACCCAAACTGCCACTCCACTC
 CAGGTGGGCCACTCCAAGGAGGCCCTGGCTGCTGCCACCTGGCTGGGCTGCCCTCCCAAC
 CCCCCTCTGGCTCAGAGCACCCCTCCCTCCCGGCCCCATGCTCCCTTCTTGCCATGG
 GCCCTCCGTCCCCGCCCGTGTGCTGTGCATGATCTGTGTGAGTGTGCGTCTGTACGGGA
 AGAGGCAGAGGGAGGCAGCCAGCGGGCGTGATGACAGTGTGCACAGCGAGGAGCAGACCC
 AGGCAGGGCCGCCAGGGTGACACAGGCCACCCTTCCTTGCCTTCAGTAACTCGGTGGGCC
 CAGGTTCTGCTCTCCCTGGGGACCCTAACCTCGCCTCCAGCTGACCTGCCCTGCTCTCT
 CCAGCTGTCCCCACAAGCAGAGCCCTGAGGGGTGGGGACCAGCTGGCCACATGGTGTGCTG
 TTTTCAGGTTAGGGGAGAGGTGGCCCTGAGGGACAGCCAGCTCTGAGTCTCAGTCGCTG
 ATCACTGCCAGGGAGGCTCAGGCTGCCATGGCTCCAGGCTCCCTCCCTGCTTAGGGCA
 AAGTCCATCGGGTCTGGGCTCAGCTTCCCTCCACATTCTCCGGCCCCAGGAGCAA
 CCCCTTGGGCTAGGTCTGACCCAGGTGTCCCTCTGGAAGGGGCTGGCTGGTGCCTATT
 TCCAGCCACCCAGCAGCTAGGGAGGCAAAGCAGGCTGCAGTCACTCCCTCAAGCCAGCG
 TTGCATGTTGGGATGGTGGCTCCTGTTGTCTTGCCTCTGGGAAGTCAGATGTCATTTT
 AGGCTGCAGTCTCATCCTGCCCTTGCATCCTCCATCGATGTGCCACGTGGGTGTCAC
 ATGTCCCAGATGCAGTATTCGGCAGCCAGCCGGGAGGGTACCTCCTCCTCCTACCAC
 CTTGGGGCTTCTCATGGGAAATGTGCCCCGCCAGGACCTCTCCCTTGTGGACAGGC
 AGGGAGATGCATGCGAGTGCATGCAGCAGGGGATGGGGCCGTGTCCTGTGCCCCACCT
 CCCTCGGCTTTACTCCTGCCAGTGACTGTGACCACTGTCCGTGTTGCCTTCTTGAACAG
 CGATTCACCCCAACCCCTTACCACAAAGTCTTGGTACAACCAGCTGCCCATTTTGTGAAA
 TTTTATGTAGAATAAACATTTGTATCTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: NotI-NotI
ACCN: NM_004603
Insert Size: 2100 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_004603.1.

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_004603.1](#), [NP_004594.1](#)

RefSeq Size: 2088 bp

RefSeq ORF: 867 bp

Locus ID: 6804

UniProt ID: [Q16623](#)

Cytogenetics: 7q11.23

Domains: t_SNARE, SynN

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: SNARE interactions in vesicular transport

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]

Transcript Variant: This variant (1) encodes the longer isoform (1).