

Product datasheet for **RG209062**

Syntaxin 1a (STX1A) (NM_004603) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Syntaxin 1a (STX1A) (NM_004603) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Syntaxin 1a
Synonyms:	HPC-1; P35-1; STX1; SYN1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209062 representing NM_004603 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGACCGAACCAGGAGCTCCGCACGGCCAAGGACAGCGATGATGATGATGATGTCGCTGTCACCG
TGGACCGAGACCGCTTCATGGATGAGTTCTTTGAGCAGGTGGAGGAGATTCGAGGCTTCATTGACAAGAT
CGCAGAGAACGTGGAGGAGGTGAAGCGGAAGCACAGTGCCATCCTGGCATCCCCAACCCCGATGAGAAG
ACGAAGGAGGAGCTGGAAGAACTCATGTCCGACATAAAGAAGACAGCAAACAAGTTCGTTCCAAGTTAA
AGAGCATCGAGCAGTCCATCGAGCAAGAGGAAGGCCTGAACCGCTCCTCCGCTGACCTGAGGATCCGGAA
GACACAGCACTCCACGCTGTCCAGAAAATTTGTGGAGGTGATGTCGGAGTACAACGCCACGAGTCCGAC
TACCGCGAGCGCTGCAAAGGCCGATCCAGAGGCAGCTGGAGATCACCGGCAGGACCACGACCAAGTGGAG
AGCTGGAGGACATGCTGGAGAGTGGGAACCCCGCCATCTTTGCCTCTGGGATCATCATGGACTCCAGCAT
CTCGAAGCAGGCTCTGAGCGAGATTGAGACGGGCACAGTGAGATCATCAAGCTGGAGAACAGCATCCGT
GAGCTACACGACATGTTTCATGGACATGGCCATGCTCGTGGAGAGCCAGGGAGAGATGATTGACAGGATCG
AGTACAATGTGGAACACGCGGTAGACTATGTGGAGAGGGCCGTGTCTGACACCAAGAAGGCCGTCAAAGTA
CCAGAGCAAGGCCGCCGGAAGAAAATCATGATCATCATCTGCTGTGTGATCTGGGCATCGTCATCGCC
TCCACTGTTGGGGCATCTTCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209062 representing NM_004603
 Red=Cloning site Green=Tags(s)

MKDRTQELRTAKDSDDDDVAVTVDRDRFMDEFFEQVEEIRGFIDKIAENVEEVKRKHSAILASPNPDEK
 TKEELEELMSDIKKTANKVRSKLSIEQSIQE EGLNRSSADLRIRKTQHSTLSRKFVEVMSEYNATQSD
 YRERCKGRIQRQLEITGRITTTSEELDMLESGNPAIFASGIIMDSISIKQALSEIETRHSEIIKLENSIR
 ELHDMFMDMAMLVESQGEMIDRIEYNVEHAVDYVERAVSDTKKAVKYQSKARRKKIMIIICCVILGIVIA
 STVGGIFA

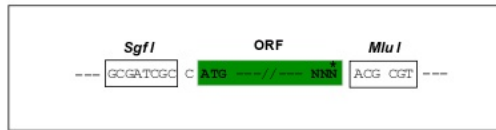
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja2341_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_004603

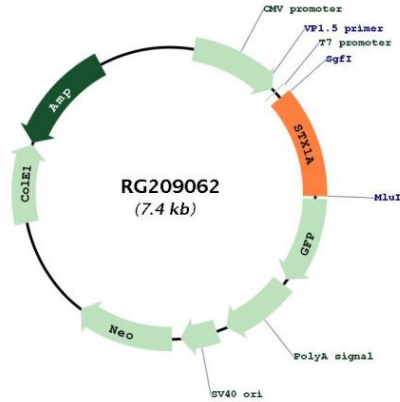
ORF Size: 864 bp

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:	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:	<ol style="list-style-type: none">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_004603.4
RefSeq Size:	2138 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]

Product images:



Circular map for RG209062