

Product datasheet for **MG216891**

Sytl2 (NM_001040085) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sytl2 (NM_001040085) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sytl2
Synonyms:	A1266830; mKIAA1597; SIp2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216891 representing NM_001040085
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATCGACTTAAGTTTCTGACAGAGGAGGAGCAAGACGCCATCTTAAGGTTCTGCAGAGGGATGCTG
 CCCTGAAGAGGGCTGAAGAGGAGAGAGTACAGACATCTGCCTGAAAAAATTAAGGATGACCAACAATAAA
 GAATATGAGTGGCCAATGGTTTTATGAAGCTAAGGCAAAAAGACACAGGGACAAAATCCACGGTGTGAC
 ATCATCAGAGCATCCATGAGAAGGAAGAAGCTCCAGCGGCAGCTGAGCAGAATAAGGACACAGCAATGA
 GGGCAAAGGAGAGCTGGGTGAATAATGTTAACAAAGATGCTGTCTTCTCCAGAGATAGCTGTTGTGGA
 AGAGCCAGAAGATGACACAGATCCCGCAGGCCAAAGTTCCAGTTTGGTGGATCCAGCTTCCAGTGTGATT
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 GCCCAAGCTGCCGAAGATCACTCCTTGAACAAACCAACCCGAGCAGTCAAAAAGTGGAAAAGCTGG
 TTTATTTAGATTTCAAAAGAGGGTGAAGTTGTGAGAATCAAAGAAAAGTCACTATCCAGATATGCCA
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 CAATCCCCAAAGCCAGAAAAGTATCTACAAATCAAATGACTTAGAGAAAAGATGATAACCAAGTCTTTTCC
 CAGACAACGGAGGGACTCCCTGAATGCGAGAGGGGCTCCAAGAGGGATCCTAAAGCGCAACTCCAGTTCC
 AGCAGCACGGACTCAGAGACCCTCCGTTTAAATTAACAACCTTGATCCGAAAAGCAAAAATCCTATCACCTG
 GCCTAACCATCCACGAGAGAATCTCTGAGAAGGAATTTCTTTAGAAAGACGACTCTTCCACAAGCTCACT
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 TTGTCTCTGCGAGTGGCAGTGTGATGAGCGTTTACAGTGGAGACTTTGGCAACCTAGAAGTGAAGGA
 AGCGTGCAGTTTGCCTGACTCAGTGGAGTCCCTGAAAGAGCTGCATGTGTTTGTGGCCAGTGTAAAGG
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 AAAAGCTACGGGACTGAAGTGGATTGGATGGATTCTACTCTGAGGAAGTTGCTCTCTGGGAGAAGATG
 GTAACCTCTCCCAACACTGGGTTGAAGCGACGCTGCCCTCCGGATGCTTCTGATTGCCAAGCTTTCCA
 AG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG216891 representing NM_001040085
 Red=Cloning site Green=Tags(s)

MIDL SFL TEEEQDAILKVLQRDAALKRAEEERVHRLPEKIKDDQQLKNMSGQWFYEAKAKRHRDKIHGAD
 IIRASMRKRLPAAAEQNKDTAMRAKESWYNNVKNDAVLPPEIAVVEEPEDDTPAGPSSSLVDPASSVI
 DMSQESTRTPAVSLPKQRKNPFNSPKLPEDHSLQQTKEQSKTGKAGLFQISKEGELSESKEKSSIPDMP
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 SSTDSETLRLNLYNLDPKSKILSPGLTIHERISEKEFSLEDDSSSLEPLKHVRFSAVKNELPQSPRPVL
 GQEVGEFTVLESQQLQNGTEDAGDIEEFQNHPEL SHKTPLSHYQLVSSPDSGREREQLMSSGSAPRDEI
 PCHSDILPTGPQCVESSSVINGQQEKSSHFTKLPSSEL SKSPSDEL TQCGEPEPSQTADHSFRDRHQGSEE
 EHSPLVLTERRAARKLPSKSLEDIPSDSSNQAKVDNLPEELVRSADVSTVPSLPDNQFSHPDKLKRMS
 KSVPAFLQDESDRETDTASESSYQLRRYKSPSSLTNLSSSSGMTSLSSASGSVMSVYSGDFGNLEVKG
 SVQFALDYVESLKELVHVAQCKDLAAADVKKQRSDPYVKTYLLPDKGKMGKKKTLVVKKTLNPVYNEIL
 RYKIERQFLKTQKLNLSVWHRDTFKRNSFLGEVELDLETWDWDSKQNKQLKWYPLKRKTPVALETENRG
 EMKLALQYVPEPSPGKLPPTTGEVHIWKECLDLPLLRGSHLNSFVKCTILPDTSRKSRQKTRAVGKTTN
 PVFNHTMYVDGFRPEDLMEACVELTVWDHYKLTNQFLGGLRIGFGTGKSYGTEVDWMDSTSEEVALWEKM
 VNSPNTWVEATLPLRMLLIAKLSK

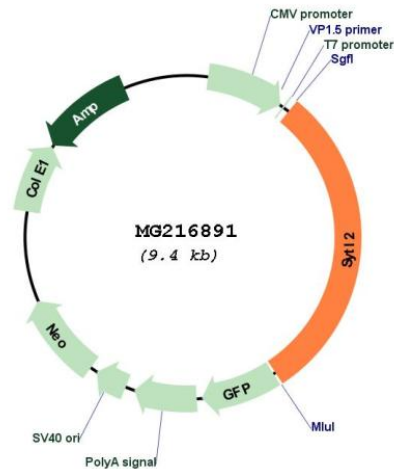
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001040085

ORF Size: 2802 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_001040085.2](#), [NP_001035174.1](#)

RefSeq Size: 3810 bp

RefSeq ORF: 2805 bp

Locus ID: 83671

UniProt ID: [Q99N50](#)

Cytogenetics: 7 E1

Gene Summary:

Isoform 11 acts as a RAB27A effector protein and plays a role in cytotoxic granule exocytosis in lymphocytes. Required for cytotoxic granule docking at the immunologic synapse. Isoform 1 may play a role in melanosome transport and vesicle trafficking. It controls melanosome distribution in the cell periphery and regulates melanocyte morphology. Isoform 1 acts as a positive mediator of mucus secretion by the surface mucus cells of the stomach. Mediates basal mucus secretion by gastric surface cells by promoting the proper granule biogenesis and docking of mucus granules with the apical plasma membrane.[UniProtKB/Swiss-Prot Function]