

## Product datasheet for **MR231415**

### Sytl2 (NM\_001289583) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sytl2 (NM_001289583) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sytl2
Synonyms:	A1266830; mKIAA1597; Slp2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>MR231415 representing NM\_001289583  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGATCGACTTAAGTTTCTGACAGAGGAGGAGCAAGACGCCATCTTAAAGTTCTGCAGAGGGATGCTG  
CCCTGAAGAGGGCTGAAGAGGAGAGAGTACAGACATCTGCCTGAAAAAATTAAGGATGACCAACAATAA  
GAATATGAGTGGCCAATGGTTTTATGAAGCTAAGGCAAAAAGACACAGGGACAAAATCCACGGTGTGAC  
ATCATCAGAGCATCCATGAGAAGGAAGAAGCTCCACGCGCAGCTGAGCAGAATAAGGACACAGCAATGA  
GGGCAAAGGAGAGCTGGGTGAATAATGTTAAACAAAGATGCTGTCTTCTCCAGAGATAGCTGTTGTGGA  
AGAGCCAGAAGATGACACAGATCCCGCAGGCCAAAGTTCCAGTTTGGTGGATCCAGCTTCCAGTGTGATT  
GATATGTCCAGGAAAGTACGAGGACTCCAGCTGTGTCTCTGCCAAGCAAAGGAAGAATCCATTCAACA  
GCCCAAGCTGCCGAAGATCACTCCTTGCAACAAACCAACCCGAGCAGTCAAAAAGTGGAAAAGCTGG  
TTTATTTAGATTTCAAAAGAGGGTGTGTTGTGAGAATCAAAGAAAAGTCACTATCCAGATATGCCA  
CGTCAGCAGTTAGAGAAAACCAAGCAAACCTGTATCCACAGAGCCTGAAAAATGCGTCTCATACCAAAGCTC  
CAATCCCCAAAGCCAGAAAACCTGATCTACAAATCAAATGACTTAGAGAAAAGATGATAACCAAGTCTTTTCC  
CAGACAACGGAGGGACTCCCTGAATGCGAGAGGGGCTCCAAGAGGGATCCATAAGCGCAACTCCAGTTCC  
AGCAGCACGGACTCAGAGACCCTCCGTTTAAATTAACAACCTTGATCCGAAAAGCAAAAATCCTATCACCTG  
GCCTAACCATCCACGAGAGAATCTCTGAGAAGGAATTTTCTTTAGAAAGCAGACTCTTCCACAAGCTCACT  
AGAGCCGTTAAGCACGTGAGATTCTCTGCCGTGAAGAATGAGCTTCCACAAAGTCTAGACCCGTCCTT  
GGCCAGGAAGTGGGAGAAATTTACTGTTTGAATCTGACCAGTTGCAAAAATGGAAGTGAAGTGCAGGGG  
ACATAGAGGAGTTTCAGAATCACCCAGAGCTCTCCACAAAACACCTTTGTCTCATTATCAGTTAGTGTGTC  
AAGCCCAAGCGATTTCAGGAAGGGAAAGAGAACAGCTGATGTCTTCTGGGTCTGCTCCAAGAGATGAGATC  
CCTTGTCATTCAGACATTCTACCCACAGGACCTCAGTGTGTTGAGAGTTCATCCGTCATCAATGGGAAC  
AAGAGAAATCATCACATTTTACAAAGCTTCCATCAGAATTGTCCAAAAGCCCTTCCGATGAACTGACTCA  
GTGTGGTGTGAGCCTGAGCCATCACAGACAGCAGACCACAGTTTTAGAGACCATCGGCAAGGTTCAGAAGAA  
GAGCACAGCCCTGTTTTGAAAACCTGGAAGAAGAGCTGCTAGGAAATGCTTCCAAAAGTCTAGAAG  
ACATTCATCAGATTCATCAAATCAAGCAAAAGTAGATAATCTGCCTGAAGAATTAGTGCAGTGTGCTGA  
AGATGATCAAAAAGCCGACCAAGAACCAGATACAAATGAATGTATACCAGGAATTTCCACAGTGCCTTCA  
CTGCCTGATAATCAGTTTTCCACCCCTGACAAAACCTCAAAGGATGAGCAAGTCCGTGCCAGCATTTCTTC  
AAGATGAGAGCGATGACAGAGAAACAGACACAGCATCAGAGAGCAGCTACCAGCTCAGGAGATACAGAA  
GAGCCCCAGCTCATTAAACCAATCTTAGCAGCTCCTCTGGCATGACGTCTTGTCTCTGCGAGTGGCAGT  
GTGATGAGCGTTTACAGTGGAGACTTTGGCAACCTAGAAGTAAAAGGAAGCGTGCAGTTTGCAGTGCAGT  
ACGTGGAGTCCCTGAAAGAGCTGCATGTGTTGTGGCCAGTGTAAAGGATTTAGCAGCAGCAGATGTTAA  
GAAACAGCGCTCAGATCCGTATGTAAGACCTATCTGCTACCAGACAAAGGCAAAAATGGGCAAGAAGAAG  
ACACTCGTAGTGAAGAAGACCTTGAATCCTGTATACAACGAGATATTGCGGTATAAAATGAAAGGCAAT  
TCTTAAAGACGCAGAAGTTGAACCTGTCCGTTTGGCATCGGGATACATTTAAGCGCAACAGCTTTCTGGG  
GGAGTGGAGCTCGACCTGGAACGTGGGATTTGGACAGCAAAACAGAACAACAGCTGAAGTGGTACCCA  
CTGAAGGGAAGACAGCACCCAGTTGCCCTCGAGACAGAAAACAGAGGTGAAATGAAACTAGCTCTCCAGT  
ATGTTCCGGAACCAAGCCCTGGCAAAAAGCTTCTACAACCTGGAGAAGTCCACATCTGGGTGAAGGAATG  
CCTTGACCTCCCACTGTTGAGGGCAGCCACCTAAATCTTTTGTAAATGTACCATCCTTCCAGATACC  
AGTAGAAAAAGTCGCCAGAAGACAAGAGCTGTAGGAAAACCAACCCCGTCTTCAACCATACCATGG  
TGTATGATGGGTTGAGGCTGAAGATCTGATGGAAGCCTGTGTAGAACTCACAGTCTGGGACATTATAA  
ACTAACCAACAGTTTCTGGGAGTCTCCGATCGGCTTGGAAACAGGAAAAAGCTACGGGACTGAAGTG  
GATTGGATGGATTCTACTTCTGAGGAAGTTGCTCTCTGGGAGAAGATGGTAAACTCTCCCAACACTGGG  
TTGAAGCGACGCTGCCCTCCGGATGCTTCTGATTGCCAAGCTTCCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231415 representing NM\_001289583  
 Red=Cloning site Green=Tags(s)

MIDL SFL TEEEQDAILKVLQRDAALKRAEEERVHRLPEKIKDDQQLKNMSGQWFYEAKAKRHRDKIHGAD  
 IIRASMRKRLPAAAEQNKDTAMRAKESWVNNVNKDAVLPPEIAVVEEPEDDTPAGPSSSLVDPASSVI  
 DMSQESTRTPAVSLPKQRKNPFNSPKLPEDHSLQQTKEQSKTGKAGLFQISKEGELSESKEKSSIPDMP  
 RQQLKPKQTVSTEPENASHTKAPIPKARKLIYKSNLLEKDDNQSFPRQRDSL NARGAPRGILKRNSSS  
 SSTDSETLRLNLYNLDPKSKILSPGLTIHERISEKEFSLEDDSSSTSEPLKHVRFSAVKNELPQSPRPVL  
 GQEVGFEFTVLESQQLQNGTEDAGDIEEFQNHPELSHKTPLSHYQLVSSPDSGREREQLMSSGSAPRDEI  
 PCHSDILPTGPQCVESSSVINGQQEKSSHFTKLPSSELSKSPSDEL TQCGEPEPSQTADHSFRDHRQGSEE  
 EHSPLVLTERRAARKLPSKSLEDIPSDSSNQAKVDNLPEELVRS AEDDQKADQEPDTNECIPGISTVPS  
 LPDNQFSHPDKLRMSKSVPAFLQDESDDRETDTASESSYQLRRYKSPSSLTNLSSSSGMTSLSSASGS  
 VMSVYSGDFGNLEVKGSVQFALDYVESLKELVHVAQCKDLAAADVKKQRSDPYVKT YLLPDKGKMGKKK  
 TLVVKKTLNPVYNEILRYKIERQFLKTQKLNLSVWHRDTFKRNSFLGEVELDLETDWDWSKQNKQLKWYP  
 LKRKTPVALETENRGMKLLALQYVPEPSGKKLPTTGEVHIWVKECLDLPLLRGSHLNSFVKCTILPDT  
 SRKSRQKTRAVGKTTNPVFNHTMVDYDGRPEDLMEACVELTVWDHYKLTNQFLGGLRIGFGTGKSYGTEV  
 DWMDSTSEEVALWEKMNVPNTWVEATLPLRMLLI AKLSK

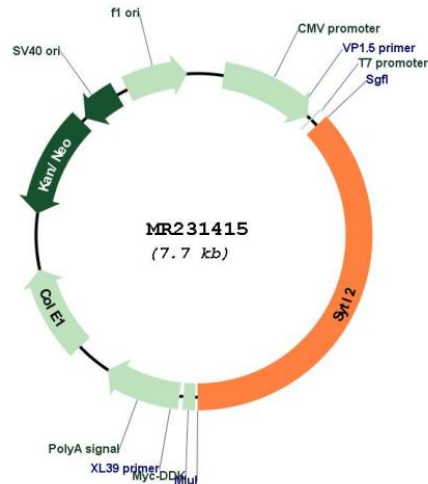
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001289583

**ORF Size:** 2850 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\\_001289583.1](#), [NP\\_001276512.1](#)

**RefSeq Size:** 4779 bp

**RefSeq ORF:** 2853 bp

**Locus ID:** 83671

**UniProt ID:** [Q99N50](#)

**Cytogenetics:** 7 E1

**MW:** 107.3 kDa

**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]