

Product datasheet for **MR229825**

Syt1 (NM_001252341) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Syt1 (NM_001252341) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Syt1
Synonyms:	AW124717; G630098F17Rik; Syt1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR229825 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGAGTGCCAGTCGTCCTGAGGCCCTGGCTGCCCTGTCACTACTGTTGCGACCCTGTCCACACA
 ACGCCACTGAGCCAGCCAGTCCTGGGGAAGGGAAGGAAGATGCCTTTTCCAAGCTGAAGCAGAAGTTTAT
 GAATGAACTGCATAAAATCCCATTGCCACCGTGGCCTTAATTGCCATAGCCATAGTTGCGGTCTTCTA
 GTCGTGACCTGCTGCTTCTGTGTCTGTAAGAAATGTTTGTCAAAAAGAAAAACAAGAAGAGGAAAGG
 AAAAGGGAGGGAAGAACGCCATTAACATGAAAGACGTGAAAGACTTAGGGAAGACCATGAAGGATCAGGC
 CCTTAAGGATGACGATGCTGAACTGGACTGACTGATGGAGAAGAAAAGGAGGCCAAGGAAGAGGAG
 AAAGTGGAAAGCTTCAATATTCAGTGGACTATGACTTCCAGAATAACCAGCTGCTGGTGGGAATCATCC
 AGGCTGCTGAACTGCCCCCCTGGACATGGGAGGCACATCTGATCCATACGTCAAAGTCTTCTGCTGCC
 CGACAAAAGAAGAAGTTTGAGACAAAAGTCCACCGAAAACCTCAATCCAGTCTTCAATGAACAGTTT
 ACTTTCAAGGTGCATACCTCGGAATTAGGTGGCAAGACACTGGTATGGCTGTGTATGATTTTGACCGCT
 TCTCCAAGCAGCATCATTGGAGAGTTCAAAGTTCCTATGAACACCGTGGATTTTGCCACGTCACCGA
 GGAGTGGCGCGATCTCCAGAGTCTGAGAAAGAAGAGCAAGAGAACTGGGTGACATCTGCTTCTCCCTC
 CGCTACGTCCTACTGCCGGAAGCTGACTGTTGTCTTCTGGAAGCCAAGAACC GAAGAAGATGGATG
 TGGGTGGCTTATCTGATCCCTATGTAAGATTACCTGATGCAGAACGGCAAGAGACTGAAGAAGAAAA
 GACAACGATTAAGAAGAACACACTTAACCCCTACTACAATGAGTCCTTCAGCTTTGAAGTCCGTTGAG
 CAAATCCAGAAAGTCAAGTGGTGGTAACTGTTTTGGACTATGACAAGATTGGCAAGAACGACCCATCG
 GCAAAGTCTTTGTGGCTACAACAGCACCGCGCAGAGCTGCGACTGGTCAGACATGCTGGCCAACCC
 CCGGCGACCCATCGCCAGTGGCACACTCTGCAGGTAGAGGAGGTTGATGCCATGCTGGCTGTCAAG
 AAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR229825 protein sequence
 Red=Cloning site Green=Tags(s)

MVSASRPEALAAPVTTVATLVPHNATEPASPGEKEDAFSKLKQKFMNELHKIPLPPWALIAIAIVAVLL
 VVTCCFCVCKKCLFKKKNKKKKEKGGKNAINMKDVKDLGKTMKDQALKDDDAETGLTDGEEKEEPKEEE
 KLGKLYSLDYDFQNNQLLVGIIQAAELPALDMGGTSDPYVKVFLLPDKKKKFETKVHRKTLNPFVNEQF
 TFKVPYSELGGKTLVMAVYDFDRFSKHDIIGEFKVPMTVDFGHVTEWRDLQSAEKEEQEKLGDICFSL
 RYVPTAGKLTVVILEAKNLKMDVGGGLSDPYVKIHLMQNGKRLKKKTTIKKNTLNPPYNEFSFEVVPFE
 QIQKVQVVVTVLDYDKIGKNDIIGKVFVGYNSTGAELRHWSMLANPRRPIAQWHTLQVEEVEVDAMLAVK
 K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001252341

ORF Size: 1266 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_001252341.1, NP_001239270.1

RefSeq Size: 4836 bp

RefSeq ORF: 1266 bp

Locus ID: 20979

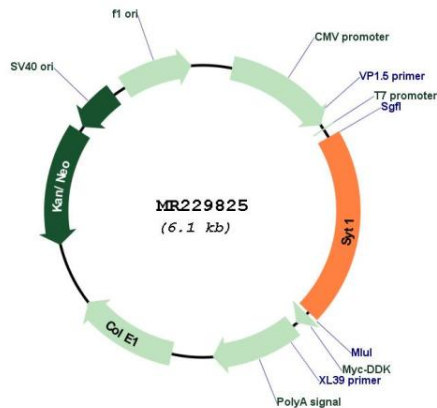
UniProt ID: P46096

Cytogenetics: 10 56.52 cM

MW: 47.4 kDa

Gene Summary: Calcium sensor that participates in triggering neurotransmitter release at the synapse (PubMed:11242035). May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse (PubMed:7961887). It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone. A Ca²⁺-dependent interaction between synaptotagmin and putative receptors for activated protein kinase C has also been reported. It can bind to at least three additional proteins in a Ca²⁺-independent manner; these are neurexins, syntaxin and AP2. Plays a role in dendrite formation by melanocytes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR229825