

Product datasheet for **MG225338**

Suz12 (NM_001163018) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Suz12 (NM_001163018) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Suz12
Synonyms:	2610028O16Rik; AI195385; AU016842; AW536442; D11Ert530; D11Ert530e; mKIAA0160
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG225338 representing NM_001163018
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCCTCAGAAGCACGGCGGTGGGGAGGGGGCGGCTCGGGGCCAGCGCGGGTCCGGGGAGGCG
 GCTTCGGGGTTCGGCGCGCGCGGTGGCGCGCGGCTTCGGGCGCAAATCCGGCGCGGGGGCTGTGG
 AGGCGCGCGCAGTTACTCGGCCTCCTCCTCCTCGGCGCGCGCGCGCGCGCGGGGGCCGCGGTG
 TTGCCGTTGAAGAAGCCGAAAATGGAGCACGTCCAGGCTGACCACGAGCTTTTCTCCAGGCCTTTGAGA
 AACCAACACAGATATATAGATTTCTTGAAGTCCGAAATCTTATCGCACCAATATTTTTGCACAGAACTCT
 TACTTACATGTCTCATCGAAATTCAGAACAGCATCAAAGCTTGTCTGCACATTTGCAACTTACATTT
 ACCGGTTTCTCCACAAAAATGATAAGCCATCACAAAACCTCAGAAAATGAACAAAATTTCTGTTACCTGG
 AAGTCTGCTTGTGAAAGTTTCCACAAAAAAGGAAGGATGTAAGTTGTCCAATAAGACAAGTCCCTAC
 TGGTAAAAAGCAGGTGCCTTTGAATCCTGACCTCAATCAAACAAAACCAGAAAATTTCCATCCCTGGCA
 GTTCCAGTAATGAATTTGAACCTAGTAACAGCCATATGGTGAAGTCTACTCGTTGCTGTTTAGAGTAA
 CTCGTCCAGGAAGAAGAGAAATTAATGGAATGATTAATGGAGAAACCAATGAAAATATTGATGTCAGTGA
 AGAACTCCAGCCAGAAGAAAACGAAATCGCGAAGATGGAGAAAAGACATTTGTTGCACAAATGACAGTT
 TTTGACAAAAACAGGCGTTTACAGCTTTTATAGTGGGAAATATGAAGTGGCCATGCAGGAAATGGAAGAAT
 GTCCAATAAGTAAGAAAAGAGCAACATGGGAGACAATTTCTGATGGGAAGAGGCTGCCTCCATTTGAGAC
 ATTTTCTCAGGGACCTACATTACAATTTACTCTTCGATGGACAGGAGAAAACCAACGATAAGTCTACAGCT
 CCTGTTGCCAAGCCTCTTGCCACTAGAAATTCAGAGAGCCTTCATCAGGAAAATAAGCCTGGTTCTGTTA
 AACCTGCACAAACTATTGCTGTTAAGGAGACGCTGACTACAGAGCTGCAACAAGAAAAGAAAAGGATAA
 TTCAAATGAAAAGTCGCCAGAAGTTAAGAATATTTTATCAGTTCCTTTATAACAATAATACAAGACAACAG
 ACAGAAGCCAGAGACGACCTGCACTGCCGTGGTGCACCTGAACTGCCGTAAACTGTATAGCTTACTCA
 AACATCTAAAGCTCTGCCACAGCAGTTTCACTTCAATTACGTATATCATCCAAAAGGTGCTAGGATAGA
 TGTTTCAATCAATGAGTGTATGATGGCTCCTATGCAGGAAATCCTCAGGATATACATCGCCAACCTGGA
 TTTGCTTTTAGTCGAAATGGACCGTAAAGAGAACACCTATCACACATTTCTTGTGTTGCAGGCCAAAAA
 GAACAAAAGCAAGCATGTCGGAGTTTCTTGAATCTGAAGATGGAGAAGTGGAGCAGCAGAGAACATACAG
 CAGTGGCCACAATCGTCTCTATTTCCACAGTGATACCTGCTTACCTCTTCGGCCACAAGAAATGGAAGTA
 GATAGTGAAGATGAGAAAGATCCAGAATGGCTGAGAGAAAAACCATTACTCAAATTAAGAAATTTCTG
 ATGTGAATGAAGGAGAGAAAGAAGTGAAGCTGTGGAACCTCCATGTCATGAAGCATGGATTTATTGC
 TGACAATCAAATGAATCATGCCTGTATGCTGTTTGTAGAAAATATGGACAGAAAATAATTAAGAAGAAT
 TTATGTCGAAACTTATGCTTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGT
 ATAAAGCTGTTACCAAGCTCCGAGAAATGCAGCAAAAACCTAGAAAAGGAGAAATCTGCGACCCCTCAA
 TGAAGAAATAGCTGAGGAACAAAATGGAACAGCAAAATGGATTGAGTAACTAACTCAAAGAGAAAAGCT
 TTGAAAACCTGACGGTGTCTCAGGGTTCAAAACAGAGCAAGAAACAAAACCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG225338 representing NM_001163018
 Red=Cloning site Green=Tags(s)

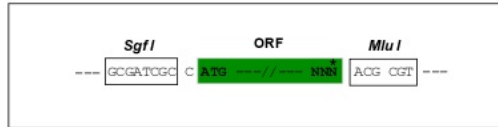
MAPQKHGGGGGGSGPSAGSGGGGFGGSAAAVAAAASGGKSGGGGCGGGGSYASSSSSAAAAAAGAAV
 LPVKKPKMEHVQADHELFLQAFKPTQIYRFLRTRNLIAPIFLHRTLTYMSHRNSRTSIKSLSAHLQLTF
 TGFFHKNDKPSQNSENEQNSVTLEVLLVKVCHKKRDKVSCPIRQVPTGKKQVPLNPDLNQTKPGNFP
 VSSNEFEPNSNSHMVKSYSLLFRVTRPGRREFNGMINGETNENIDVSEELPARRKRNREDGEKTFVAQMTV
 FDKNRRLQLLDGEYEVAMQEMEECPISKKRATWETILDGKRLPPFETFSGPTLQFTRLWTGETNDKSTA
 PVAKPLATRNSLSLHQNKPGSVKPAQTIYVAVKTELTTELTQTRKEKDNSNE SRQKLRIFYQFLYNNTRQQ
 TEARDDLHCPWCTLNCRKLYSLLKHLKLCRSRIFNYVYHPKGARIDVINECYDGSYAGNPQDIHRQPG
 FAFSRNGPVKRTPIITHILVCRPKRTKASMEFLESEEDGEVEQRTYSSGHNRLYFHSDTCLPLRPQEMEV
 DSEDEKDPWLRKTIITQIEEFSDVNEGEKEVMKLNWLHVMKHGFIADNQMNHACMLFVENYQKIIKKN
 LCRNFMLHLVSMHDFNLISIMSIDKAVTKLREMQQKLEKGESATPSNEEIAEEQNGTANGFSETNSKEKA
 LETDGVSGVPKQSKKQKL

TRTRPLE - GFP Tag - V

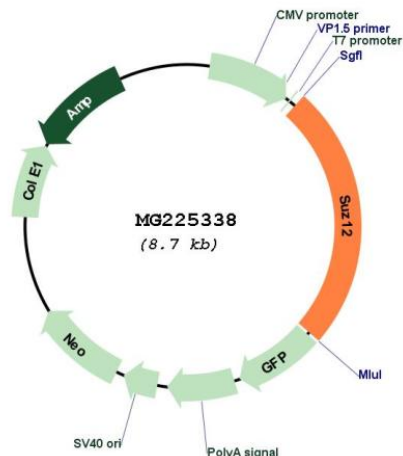
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001163018

ORF Size: 2154 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:

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_001163018.1](#), [NP_001156490.1](#)

RefSeq Size: 4380 bp

RefSeq ORF: 2157 bp

Locus ID: 52615

UniProt ID: [Q80U70](#)

Cytogenetics: 11 47.36 cM

Gene Summary: This gene encodes a core component of the polycomb repressive complex 2 (PRC2) that also includes, at least, embryonic ectoderm development protein (EED) and enhancer of zeste homolog 1 or 2 (EZH1 or EZH2). Through the methyltransferase activity of EZH1 or EZH2, the PRC2 complex methylates Lys9 and Lys27 of histone 3 and Lys26 of histone 1, leading to recruitment of the PRC1 complex, histone 2A ubiquitylation and transcriptional repression of the target genes. This gene product is essential for the activity and integrity of the PRC2 complex, and is required for X chromosome inactivation, stem cell maintenance and differentiation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009]