

Product datasheet for **MG210406**

Suz12 (NM_199196) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Suz12 (NM_199196) 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:

>MG210406 representing NM_199196
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCCTCAGAAGCACGGCGGTGGGGAGGGGGCGGCTCGGGGCCAGCGCGGGTCCGGGGAGGCG
 GCTTCGGGGTTCGGCGCGCGCGGTGGCGCGCGCGCTTCGGGCGCAAATCCGGCGCGGGGGCTGTGG
 AGCGCGCGGCGAGTTACTCGGCCTCCTCCTCCTCGGCGCGCGCGCGCGCGGGGGCCGCGGTG
 TTGCCGTTGAAGAAGCCGAAAATGGAGCACGTCCAGGCTGACCACGAGCTTTTCTCCAGGCCTTTGAGA
 AACCAACACAGATATATAGATTTCTTGAACCTCGAAATCTTATCGCACCAATATTTTTGCACAGAACTCT
 TACTTACATGTCTCATCGAAATTCAGAACAAAGCATCAAAGGAAAACATTTAAAGTTGATGATATGTTA
 TCAAAAGTAGAGAAAATGAAAGGAGAGCAAGAATCTCATAGCTTGTCTGCACATTTGCAACTTACATTTA
 CCGGTTTCTTCCAAAAATGATAAGCCATCACAAAACAGAAAATGAACAAAATCTGTTACCCCTGGA
 AGTCTGCTTGTGAAAGTTTCCACAAAAAAGGAAGGATGTAAGTTGTCCAATAAGACAAGTCCCTACT
 GGTAAAAAGCAGGTGCCTTTGAATCCTGACCTCAATCAAACAAAACAGGAAATTTCCATCCCTGGCAG
 TTTCCAGTAATGAATTTGAACCTAGTAACAGCCATATGGTGAAGTCTACTCGTTGCTGTTAGAGTAAC
 TCGTCCAGGAAGAAGAGAATTTAATGGAATGATTAATGGAGAAACCAATGAAAATATTGATGTCAGTGAA
 GAACCTCCAGCCAGAAGAAAACGAAATCGCAAGATGGAGAAAAGACATTTGTTGCACAAATGACAGTTT
 TTGACAAAAACAGGCGTTTACAGCTTTTAGATGGGGAATATGAAGTGCCATGCAGGAAATGGAAGAATG
 TCCAATAAGTAAGAAAAGAGCAACATGGGAGACAATCTTGTATGGGAAGAGGCTGCCTCCATTTGAGACA
 TTTTCTCAGGGACCTACATTACAATTTACTCTTCGATGGACAGGAAAACCAACGATAAGTCTACAGCTC
 CTGTTGCCAAGCCTTTGCCACTAGAAATTCAGAGACCTTCATCAGGAAAATAAGCCTGGTTCTGTTAA
 ACCTGCACAAAACATTGCTGTTAAGGAGACGCTGACTACAGAGCTGCAACAAGAAAAGAAAAGGATAAT
 TCAAAATGAAAGTCGCGAGAAGTTAAGAATATTTTATCAGTTCTTTATAACAATAATACAAGACAACAGA
 CAGAAGCCAGAGACGACCTGCACTGCCCGTGGTGCACCTGAACTGCCGTAACCTGTATAGCTTACTCAA
 ACATCTAAAGCTCTGCCACAGCAGGTTTCACTTCAATTACGTATATCATCCAAAAGGTGCTAGGATAGAT
 GTTTCAATCAATGAGTGTATGATGGCTCCTATGCAGGAAATCCTCAGGATATACATCGCCAACCTGGAT
 TTGCTTTTAGTCGAAATGGACCGGTAAGAGAACACCTATCACACATATTCTGTTTGCAGGCCAAAAAG
 AACAAAAGCAAGCATGTCGGAGTTTCTTGAATCTGAAGATGGAGAAGTGGAGCAGCAGAGAACATACAGC
 AGTGGCCACAATCGTCTCTATTTCCACAGTGATACCTGCTTACCTCTTCGGCCACAAGAAATGGAAGTAG
 ATAGTGAAGATGAGAAAGATCCAGAATGGCTGAGAGAAAAAACCTTACTCAAATGAAGAATTTTCTGA
 TGTGAATGAAGGAGAGAAAGAAGTGAAGCTGTGGAACCTCCATGTCATGAAGCATGGATTTATTGCT
 GACAATCAAATGAATCATGCCTGTATGCTGTTTGTAGAAAATTATGGACAGAAAATAATTAAGAAGAAAT
 TATGTCGAAACTTCATGCTTCACTAGTCAGCATGCATGACTTTAATCTTATTAGCATAATGTCAATAGA
 TAAAGCTGTTACCAAGCTCCGAGAAATGCAGCAAAAACAGAAAAGGAGAACTGCGACCCCTTCAAAT
 GAAGAAATAGCTGAGGAACAAAATGGAACAGCAATGGATTCAAGTAACTAACTCAAAGAGAAAGCTT
 TGGAACTGACGGTGTCTCAGGGTTCCAAAACAGAGCAAGAAAACAAAACCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210406 representing NM_199196
 Red=Cloning site Green=Tags(s)

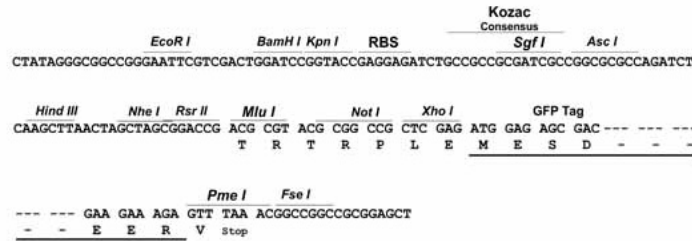
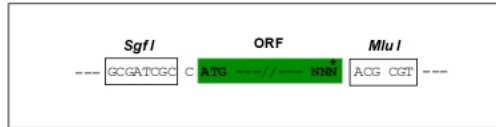
MAPQKHGGGGGGSGPSAGSGGGGFGSAAAVAAAASGGKSGGGGCGGGGSYASSSSAAAAAAGAAV
 LPVKKPKMEHVQADHELFLQAFKPTQIYRFLRTRNLIAPIFLHRTLTYMSHRNSRTSIKRKTFKVDML
 SKVEKMGEGESHLSAHLQLTFGFFHKNDKPSQNSENEQNSVTLEVLVVKVCHKRKRKDVSCPIRQVPT
 GKKQVPLNPDNLNQTKPGNFPSLAVSSNEFEPNSNHMVKSYSLLFRVTRPGRREFNGMINGETNENIDVSE
 ELPARRKRNRREDGEKTFVAQMTVFDKNRRLQLLDGEYEVAMQEMEECPISKKRATWETILDGKRLPPFET
 FSQGPTLQFTLRWTGETNDKSTAPVAKPLATRNSESLHQENKPGSVKPAQTIIVKETLTTELQTRKEKDN
 SNESRQKLRIFYQFLYNNNRQQTEARDDLHCPWCTLNCRKLYSLLKHLKLCHSRFIFNYVYHPKGARID
 VSINECYDGSYAGNPQDIHRQPGFAF SRNGPVKRTPIITHILVCRPKRTKASMSEFLESEEDGEVEQQRTYS
 SGHNRLYFHSDTCLPLRPQEMEVDSEDEKDPWLREKTIITQIEEFSDVNEGEKEVMKLNHLHVMKHGFIA
 DNQMNHACMLFVENYQKIIKKNL CRNFMLHLVSMHDFNLISIMSIDKAVTKLREMQQKLEKGESATPSN
 EEIAEEQNGTANGFSETNSKEKALET DGVSGVPKQSKKQKL

TRTRPLE - GFP Tag - V

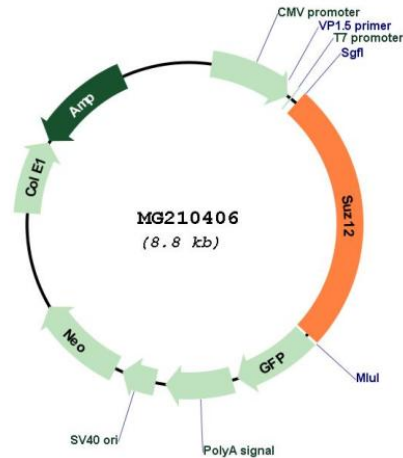
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_199196

ORF Size: 2223 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_199196.2](#), [NP_954666.1](#)

RefSeq Size: 4449 bp

RefSeq ORF: 2226 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]