

## Product datasheet for **MR210406**

### Suz12 (NM\_199196) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Suz12 (NM_199196) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Suz12
Synonyms:	2610028O16Rik; AI195385; AU016842; AW536442; D11Ert530; D11Ert530e; mKIAA0160
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>MR210406 representing NM\_199196  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCGCCTCAGAAGCACGGCGGTGGGGAGGGGCGGCTCGGGGCCAGCGCGGGTCCGGGGAGGCG  
GCTTCGGGGTTCGGCGCGCGCGGTGGCGCGCGGCTTCGGCGGCAAAATCCGGCGCGGGGGCTGTGG  
AGCGCGCGCAGTTACTCGGCCTCCTCCTCCTCGCGCGCGCGCGCGCGCGGGGGCCGCGGTG  
TTGCCGTGAAGAAGCCGAAAATGGAGCACGTCCAGGCTGACCACGAGCTTTTCTCCAGGCCTTTGAGA  
AACCAACACAGATATATAGATTTCTTGAAGTCCGAAATCTTATCGCACCAATATTTTTGCACAGAACTCT  
TACTTACATGTCTCATCGAAATTCAGAACAGCATCAAAGGAAAACATTTAAAGTTGATGATATGTTA  
TCAAAGTAGAGAAAATGAAAGGAGAGCAAGAATCTCATAGCTTGTCTGCACATTTGCAACTTACATTTA  
CCGTTTTCTCCAAAAATGATAAGCCATCACAAAACAGAAAATGAACAAAATCTGTTACCCTGGA  
AGTCTGTGTTGAAAGTTTGCACAAAAAAGGAAGGATGTAAGTTGTCCAATAAGACAAGTCCCTACT  
GGTAAAAAGCAGGTGCCTTTGAATCCTGACCTCAATCAAACAAAACAGGAAATTTCCATCCCTGGCAG  
TTTCCAGTAATGAATTTGAACCTAGTAACAGCCATATGGTGAAGTCTACTCGTTGCTGTTAGAGTAAC  
TCGTCCAGGAAGAAGAGAATTTAATGGAATGATTAATGGAGAAACCAATGAAAATATTGATGTCAGTGAA  
GAACCTCCAGCCAGAAGAAAACGAAATCGCAAGATGGAGAAAAGACATTTGTTGCACAAATGACAGTTT  
TTGACAAAAACAGGCGTTTACAGCTTTTAGATGGGGAATATGAAGTGCCATGCAGGAAATGGAAGAATG  
TCCAATAAGTAAGAAAAGAGCAACATGGGAGACAATCTTGTATGGGAAGAGGCTGCCTCCATTTGAGACA  
TTTTCTCAGGGACCTACATTACAATTTACTCTTCGATGGACAGGAAAACCAACGATAAGTCTACAGCTC  
CTGTTGCCAAGCCTTTGCCACTAGAAATTCAGAGAGCCTTCATCAGGAAAATAAGCCTGGTTCTGTTAA  
ACCTGCACAAAACATTGCTGTTAAGGAGACGCTGACTACAGAGCTGCAAAACAAGAAAAGAAAAGGATAAT  
TCAAATGAAAGTCGCGAGAAGTTAAGAATATTTTATCAGTTCTTTATAACAATAATACAAGACAACAGA  
CAGAAGCCAGAGACGACCTGCACTGCCCGTGGTGCACCTGAACTGCCGTAACCTGTATAGCTTACTCAA  
ACATCTAAAGCTCTGCCACAGCAGGTTTCACTTCAATTACGTATATCATCCAAAAGGTGCTAGGATAGAT  
GTTTCAATCAATGAGTGTATGATGGCTCCTATGCAGGAAATCCTCAGGATATACATCGCCAACCTGGAT  
TTGCTTTTAGTCGAAATGGACCGGTAAGAGAACACCTATCACACATATTCTGTTTGCAGGCCAAAAAG  
AACAAAAGCAAGCATGTCGGAGTTTCTTGAATCTGAAGATGGAGAAGTGGAGCAGCAGAGAACATACAGC  
AGTGGCCACAATCGTCTCTATTTCCACAGTGATACCTGCTTACCTCTTCGGCCACAAGAAATGGAAGTAG  
ATAGTGAAGATGAGAAAGATCCAGAATGGCTGAGAGAAAAACCAATTAATCAAAATGAAGAATTTCTGA  
TGTGAATGAAGGAGAGAAAGAAGTGAAGCTGTGGAACCTCCATGTCATGAAGCATGGATTTATTGCT  
GACAATCAATGAATCATGCCTGTATGCTGTTTGTAGAAAATTATGGACAGAAAATAATTAAGAAGAAAT  
TATGTCGAAACTTCATGCTTCACTAGTCAGCATGCATGACTTTAATCTTATTAGCATAATGTCAATAGA  
TAAAGCTGTTACCAAGCTCCGAGAAATGCAGCAAAAACAGAAAAGGAGAAATCTGCGACCCCTTCAAT  
GAAGAAATAGCTGAGGAACAAAATGGAACAGCAATGGATTCAAGTAACTAACTCAAAGAGAAAAGCTT  
TGGAACTGACGGTGTCTCAGGGTTCCAAAACAGAGCAAGAAAACAAAACCTC

**ACGCGT**ACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210406 representing NM\_199196  
 Red=Cloning site Green=Tags(s)

MAPQKHGGGGGGSGPSAGSGGGGFGGSAAVAAAAASGGKSGGGGCGGGGSYASSSSAAAAAAGAAV  
 LPVKKPKMEHVQADHELFLQAFEKPTQIYRFLRTRNLIAPIFLHRTLTYMSHRNSRTSIKRKTFKVDML  
 SKVEKMKGEQESHLSAHLQLTFGFFHKNDKPSQNSENEQNSVTLEVLVVKVCHKRKRKDVSCPIRQVPT  
 GKQVPLNPDNLNQTGPNFSLAVSSNEFEPNSNHMVKSYSLLFRVTRPGRREFNGMINGETNENIDVSE  
 ELPARRKRNRREDGEKTFVAQMTVFDKNRRLQLLDGEYEVAMQEMECPISKKRATWETILDGKRLPPFET  
 FSQGPTLQFTLRWTGETNDKSTAPVAKPLATRNSESLHQENKPGSVKPAQTIIVKETLTTELQTRKEKDN  
 SNESRQKRLRIFYQFLYNNNTRQQTEARDDLHCPWCTLNCRKLYSLLKHLKLCHSRIFNYYVHPKARID  
 VSINECYDGSYAGNPQDIHRQPGFAF SRNGPVKRTPIITHILVCRPKRTKASMSEFLESEEDGEVEQQRTYS  
 SGHNRLYFHSDTCLPLRPQEMEVDSEDEKDPWLREKTIITQIEEFSDVNEGEKEVMKLNHLHVMKHGFIA  
 DNQMNHACMLFVENYQKIIKKNL CRNFMLHLVSMHDFNLISIMSIDKAVTKLREMQQKLEKGESATPSN  
 EEIAEEQNGTANGFSETNSKEKALETGVSQVQKQSKKQKL

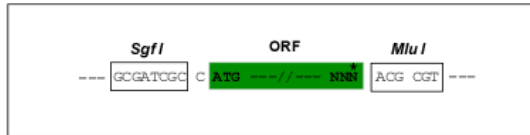
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

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](mailto: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

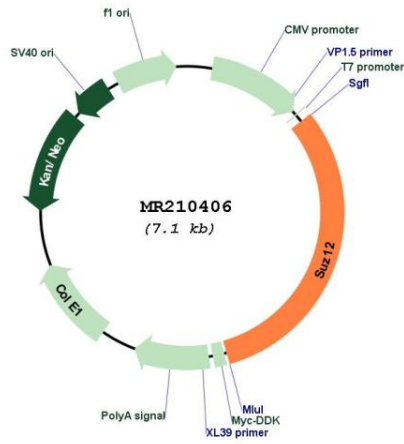
**UniProt ID:** [Q80U70](#)

**Cytogenetics:** 11 47.36 cM

**MW:** 83.5 kDa

**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]

Product images:



Circular map for MR210406