

Product datasheet for **RC212253**

MUSK (NM_005592) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MUSK (NM_005592) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MUSK
Synonyms:	CMS9; FADS; FADS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212253 representing NM_005592
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAGAGCTCGTCAACATTCCACTGGTACATATTCTTACTCTGGTTGCCTTCAGCGGAACTGAGAAAC
 TTCAAAAAGCTCCTGTCATCACCCTCCTTTGAAACAGTGGATGCCTTAGTTGAAGAAGTGCTACTTT
 CATGTGTGCACTGGAATCCTACCCCGAGCTGAGATTTCTGGACTAGAAATAAAATTCTCATTAACCTC
 TTTGACACCCGGTACAGCATCCGGGAGAAATGGGCAGCTCCTCACCATCCTGAGTGTGGAAGACAGTGATG
 ATGGCATTACTGCTGCACGGCCAACAATGGTGTGGGAGGAGCTGTGGAGAGTTGTGGAGCCCTGCAAGT
 GAAGATGAAACCTAAAATAACTCGTCTCCATAAATGTGAAAATAATAGAGGGATTAAGAGCAGTCCTA
 CCATGTACTACAATGGGTAAATCCCAAACCATCAGTGTCTGGATAAAGGGAGACAGCCCTCTCAGGGAAA
 ATTCCCGAATTGCAGTTCTTGAATCTGGGAGCTTGAGGATTCATAACGTACAAAAGGAAGATGCAGGACA
 GTATCGATGTGTGCAAAAACAGCCTCGGGACAGCATATTCAAAGTGGTGAAGCTGGAAGTTGAGGTT
 TTTGCCAGGATCCTGCGGGCTCCTGAATCCCACAATGTCACCTTTGGCTCCTTTGTGACCCCTGCACTGTA
 CAGCAACAGGCATTCTGTCCCCACCATCACCTGGATTGAAAACGAAATGCTGTTTTCTTCTGGGTCCAT
 TCAAGAGAGTGTGAAAGACCGAGTGATTGACTCAAGACTGCAGCTGTTTATCACCAAGCCAGGACTCTAC
 ACATGCATAGCTACCAATAAGCATGGGGAGAAGTTCAGTACTGCCAAGGCTGCAGCCACCATCAGCATAG
 CAGAATGGAGTAAACCACAGAAAGATAACAAAGGCTACTGCGCCAGTACAGAGGGGAGGTGTGTAATGC
 AGTCTTGCCAAAAGATGCTCTTGTTTTTCTCAACCTCCTATGCGGACCCTGAGGAGGCCAAGAGCTA
 CTGGTCCACACGGCTGGAATGAACTGAAAGTAGTGAGCCAGTCTGCCGGCCAGCTGCTGAGGCTTTGT
 TGTGTAACCATCTTCCAGGAGTGCAGTCTGGAGTAGTGCCTACTCCTATTCCATTTGCAGAGAGTA
 CTGCTTGGCAGTAAAGGAGCTCTTCTGCGCAAAAAGAAATGGCTGGTAATGGAAGAGAAGACCACAGAGGA
 CTCTACAGATCCGAGATGCATTTGCTGTCCGTGCCAGAATGCAGCAAGCTTCCCAGCATGCATTGGGACC
 CCACGGCTGTGCCAGACTGCCACATCTAGATTATAACAAAGAAAACCTAAAAACATTCCCACCAATGAC
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 CTCTCTATTGCTGCCGAAGAAGAAAACAATGAAAAATAAGAAAAGAGAATCAGCAGCAGTAACCCTCAC
 CACTGCCTTCTGAGCTCTTACTAGATAGACTTCATCCCAACCCATGTACCAGAGGATGCCGCTCCTT
 CTGAACCCAAAATTGCTCAGCCTGGAGTATCCAAGGAATAACATTGAATATGTGAGAGACATCGGAGAGG
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 AGTAAAGATGCTCAAAGAAGAAGCCTCGGCAGATATGCAAGCGGACTTTCAGAGGGAGGCAGCCCTCATG
 GCAGAAATTTGACAACCTAACATTGTGAAGCTATTAGGAGTGTGTGCTGTGCGGAAGCCAATGTGCCTGC
 TCTTTGAATACATGGCCTATGGTGACCTCAATGAGTTCCTCCGCAGCATGTCCCCCACACCGTGTGCAG
 CCTCAGTCACAGTGACTTGTCTATGAGGGCTCAGGTCTCCAGCCCTGGGCCCCACCCCTCCTGTGCT
 GAGCAGCTTTGCATTGCCAGGCAGGTGGCAGCTGGCATGGCTTACCTCTCAGAACGTAAGTTTGTTCACC
 GAGATTTAGCCACCAGGAAGTGCCTGGTGGGCGAGAATGTTGGTGGAAATGCCGACTTTGGCCTCTC
 CAGGAACATCTACTCAGCAGACTACTACAAAGCTAATGAAAACGACGCTATCCCTATCCGTTGGATGCCA
 CCAGAGTCCATTTTTATAACCGCTACACTACAGAGTCTGATGTGTGGCCTATGGCGTGGTCTCTGGG
 AGATCTTCTCCTATGGCCTGCAGCCCTACTATGGGATGGCCATGAGGAGTCAATTTACTACGTGCGAGA
 TGGCAACATCCTCTCCTGCCCTGAGAACTGCCCGTGGAGCTGTACAATCTCATGCGTCTATGTTGGAGC
 AAGCTGCCTGCAGACAGACCCAGTTTACCAGTATTCACCGAATTCGGAACGCATGTGTGAGAGGGCAG
 AGGGAAGTGTGAGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212253 representing NM_005592
 Red=Cloning site Green=Tags(s)

MRELVNIPLVHILTLVAFSGTEKLPKAPVITTPLETVDALVEEVATFMCAVESYPQPEISWTRNKILIKL
 FDTRYSIRENGQLLTILSVEDSDDGIYCCTANNGVGGAVESCGALQVKMKPKITRPPINVKIEGLKAVL
 PCTTMGNPKPSVSWIKGDSPLRENSRIAVLESGSLRIHNVQKEDAGQYRCVAKNSLGTAYSKVVKLEVEV
 FARILRAPESHNVTFGSFVTLHCTATGIPVPTITWIENGNVSSGSIQESVKDRVIDSRLQLFITKPGLY
 TCIATNKHGEKFSATAKAATISIAEWSKPQKDNKGCAQYRGEVCAVLAKDALVFLNTSYADPEEAQEL
 LVHTAWNELKVVSPVCRPAAEALLCNHIFQECSPGVVPPIPICREYCLAVKELFCAKEWLVMEEKTHRG
 LYRSEMHLLSVPECSKLPMSHWDPTACARLPHLDYNKENLKTFFPMTSSKPSVDIPNLPSSSSSSFSVSP
 TYSMTVIIISIMSSF AIFVLLTITTL YCCR R R K Q W K N K R E S A A V T L T T L P S E L L D R L H P N P M Y Q R M P L L
 L N P K L L S L E Y P R N N I E Y V R D I G E G A F G R V F Q A R A P G L L P Y E P F T M V A V K M L K E E A S A D M Q A D F Q R E A A L M
 A E F D N P N I V K L L G V C A V G K P M C L L F E Y M A Y G D L N E F L R S M P H T V C S L S H S D L S M R A Q V S S P G P P L S C A
 E Q L C I A R Q V A A G M A Y L S E R K F V H R D L A T R N C L V G E N M V V K I A D F G L S R N I Y S A D Y Y K A N E N D A I P I R W M P
 P E S I F Y N R Y T T E S D V W A Y G V V L W E I F S Y G L Q P Y Y G M A H E E V I Y Y V R D G N I L S C P E N C P V E L Y N L M R L C W S
 K L P A D R P S F T S I H R I L E R M C E R A E G T V S V

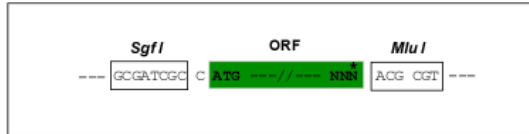
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4383_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

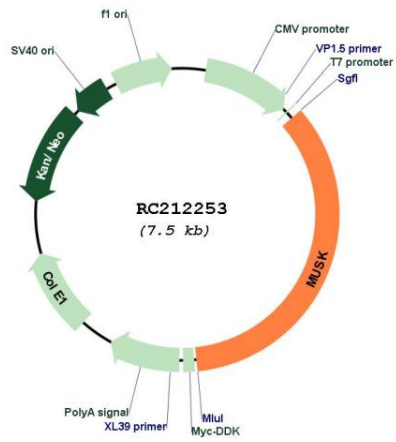
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:	NM_005592
ORF Size:	2607 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_005592.4
RefSeq Size:	2666 bp
RefSeq ORF:	2610 bp
Locus ID:	4593
UniProt ID:	O15146
Cytogenetics:	9q31.3
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
MW:	96.9 kDa
Gene Summary:	<p>This gene encodes a muscle-specific tyrosine kinase receptor. The encoded protein may play a role in clustering of the acetylcholine receptor in the postsynaptic neuromuscular junction. Mutations in this gene have been associated with congenital myasthenic syndrome. Alternatively spliced transcript variants have been described.[provided by RefSeq, Oct 2009]</p>

Product images:



Circular map for RC212253