

Product datasheet for **MG226302**

Musk (NM_001037130) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Musk (NM_001037130) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Musk
Synonyms:	Mdk4; Mlk; Ns; Nsk1; Nsk2; Nsk3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226302 representing NM_001037130
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAGAGCTTGTCAACATTCCACTGTTACAGATGCTCACCCCTGGTTGCCTTCAGCGGGACTGAGAAAC
 TTCAAAAGCCCCGTGCATCACCACGCCTTTGAAACTGTAGATGCCTTGTTGAAGAAGTAGCGACTTT
 CATGTGTGCCGTGGAATCCTACCCTCAGCCGAGATTTCTTGACCAGAAATAAAATTCTCATTAAGCTG
 TTTGACACCCGCTACAGCATCCGGGAGAATGGTCAGCTCCTCACCATTCTGAGCGTGAAGACAGTGATG
 ATGGCATCTACTGCTGCATAGCCAACAATGGAGTGGGAGGAGCCGTGGAGAGTTGTGGTCCCTGCAAGT
 GAAGATGAAACCTAAAATAACTCGTCTCCATTAATGTAAAAATAAGAGGGATTGAAGGCAGTTCTG
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 CTGATCCACACTGCGTGAATGAGCTGAAGGCTGTGAGTCCACTGTGCCGCCAGCTGTTGAGGCTCTGC
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 TATCCGAGGAATAACATTGAGTATGTCCGAGACATCGGAGAGGGGCGTTTGAAGAGTCTTCCAAGCAA
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 TGACAGATGCAAGCGGACTTTCAGAGGGAGGGCCCTCATGGCAGAGTTTGACAACCCCAACATTGTG
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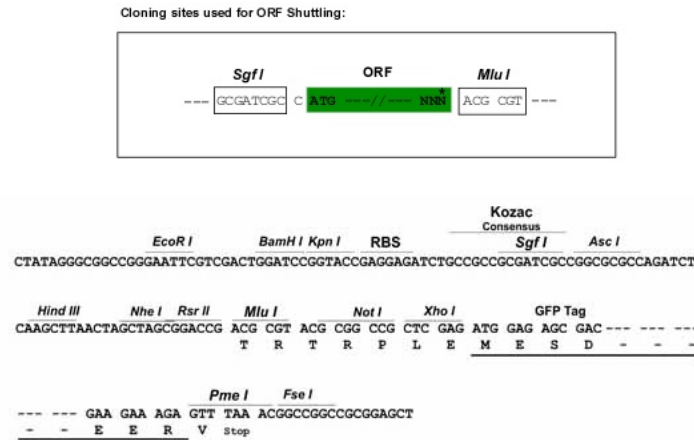
ACGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226302 representing NM_001037130
Red=Cloning site Green=Tags(s)

MRELVNIPLLQMLTLVAFSGTEKLPKAPVITTPLETVDALVEEVATFMCAYESYPQPEISWTRNKILIKL
FDTRYSIRENGQLLTILSVEDSDDGIYCCIANNGVGGAVESCGALQVKMKPKITRPPINVKIEGLKAVL
PCTTMGNPKPSVSWIKGDNALRENSRIAVLESGSLRIHNVQKEDAGQYRCVAKNSLGTAYSKLVKLEVEV
FARILRAPESHNVTFGSFVTLRCTAIGIPVPTISWIENGNVSSGSIQESVKDRVIDSRLQLFITKPGLY
TCIATNKHGEKFSTAKAAATVSIAEWSKSQKDSQGYCAQYRGEVCDAVLAKDALVFFNTSYRDPEDAQEL
LIHTAWNELKAVSPLCRPAEALLCNHLFQECSPGVVPTPMPICREYCLAVKELFCAKEWQAMEGKAHRG
LYRSGMHLLPVPECSKLPMSHRDPTACTRLPYLAFPSITSSRPSADIPNLPASTSSFVAVSPAYSMTVIIS
IVSSFALLIATLYCCRRRKEWKKKRESTAVTLTTLPSSELLLDRLHPNPMYQRMPLLLNPKLLSLE
YPRNNIEYVRDIGEGAFGRVFQARAPGLLPYEPFTMVAVKMLKEEASADMQADFQREAALMAEFDNPNIV
KLLGVCVAVGKPMCLLFEYMAYGDLNEFLRSMSPHTVCSLSHSDLSTRARVSSPGPPPLSCAEQLCIARQV
AAGMAYLSERKFVHRDLATRNCVGETMVVKIADFGLSRNIYSADYYKADGNDAIPIRWMPPEISIFYNRY
TTESDVWAYGVVLWEIFSYGLQPYYGMAHEEVIYYVRDGNILACPENCPELELYNLMRLCWSKLPADRPSF
CSIHRILQRMCEAEGTVGV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_001037130

ORF Size: 2580 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_001037130.1](#), [NP_001032207.1](#)

RefSeq Size: 3330 bp

RefSeq ORF: 2583 bp

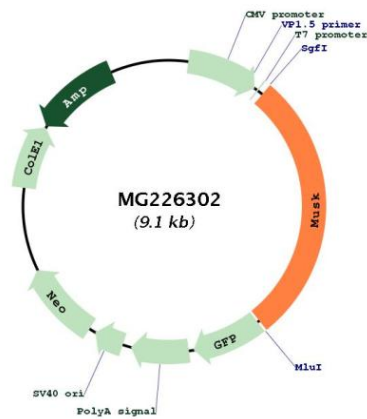
Locus ID: 18198

UniProt ID: [Q61006](#)

Cytogenetics: 4 31.87 cM

Gene Summary: This gene encodes a member of the protein tyrosine kinase family. The encoded protein is a type 1 receptor-like protein located in muscle membrane that is activated by the heparan sulfate proteoglycan agrin released by nerve cells. The encoded protein activates signaling cascades responsible for multiple aspects of motor neuron and muscle development, including organization of the postsynaptic membrane, synaptic gene transcription, patterning of skeletal muscle, anchoring of acetylcholinesterase, and guidance of motor axons. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MG226302