

Product datasheet for **MR226028**

Musk (NM_001165996) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Musk (NM_001165996) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Musk
Synonyms:	Mdk4; Mlk; Ns; Nsk1; Nsk2; Nsk3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR226028 representing NM_001165996
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGAGAGCTTGTCAACATTCCACTGTTACAGATGCTCACCTGGTTGCCTTCAGCGGGACTGAGAAAC
 TTCCAAAAGCCCTGTCATCACCCAGCCTCTTGAACCTGTAGATGCCTTGTTGAAGAAGTAGCGACTTT
 CATGTGTGCCGTGGAATCCTACCCTCAGCCGAGATTTCTTGACCAGAAATAAAATTCTCATTAAAGCTG
 TTTGACACCCGCTACAGCATCCGGGAGAATGGTCAGCTCCTCACCATTCTGAGCGTGAAGACAGTGATG
 ATGGCATCTACTGCTGCATAGCCAACAATGGAGTGGGAGGAGCCGTGGAGAGTTGTGGTCCCTGCAAGT
 GAAGATGAAACCTAAAATAACTCGTCTCCATTAATGTAAAAATAATAGAGGGATTGAAGGCAGTTCTG
 CCGTGCCTACGATGGTAACCCCAAACCATCTGTGTCTGGATCAAGGGGGACAATGCTCTCAGGGAAA
 ATTCAGAAATCGAGTTCTTGAATCTGGGAGCTTAAGGATCCATAATGTGCAAAAGGAAGATGCAGGACA
 GTACCGCTGTGTGCCAAAACAGCCTGGGCACAGCTTACTCAAACCTGGTGAAGCTGGAAGTGGAGGTT
 TTTGCAAGAATCCTGCGTCTCCTGAATCCCACAATGTCACCTTTGGTTCCTTTGTAACCCACCGCTGCA
 CAGCAATAGGCATCCCTGTCCCCACCATCAGCTGGATTGAAAACGGAAATGCTGTTTCTTCAGGTTCCAT
 TCAAGAGAGTGTGAAAGACCGAGTGATTGACTCAAGACTCCAGCTCTTCATCACAAAGCCAGGACTCTAC
 ACATGCATAGCTACCAATAAGCACGGAGAAAAGTTCAAGTACCGCAAAGGCTGCAGCCACTGTCAGCATAG
 CAGAATGGAGTAAGTACAGAAAGACAGCCAAGGCTACTGTGCCAGTACAGAGGGGAGGTGTGTGATGC
 AGTCTGGCGAAAGATGCTCTTGTCTTCTCAACACCTCTACCGGACCCCGAGGACGCCAGGAGCTG
 CTGATCCACACTGCGTGAATGAGCTGAAGGCTGTGAGTCCACTGTGCCGCCAGCTGCTGAGGCTCTGC
 TGTGTAACCACCTCTTCCAAGAGTGCAGCCCTGGAGTGGTACTACTCCCATGCCATTTCAGAGAGTA
 CTGCTGGCGGTAAGGAGCTCTTCTGTGCAAAAGGAATGGCAGGCAATGGAAGGAAAGGCCACCGGGGC
 CTCTACAGATCTGGGATGCATCTCCTTCCGGTACCAGAGTGCAGCAAGCTTCCCAGCATGCACCGGACC
 CCACAGCTGCACAAGACTGCCATATTTAGGTAACAAAGAAGTTCCTCCAGACTTTGGAAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226028 representing NM_001165996
 Red=Cloning site Green=Tags(s)

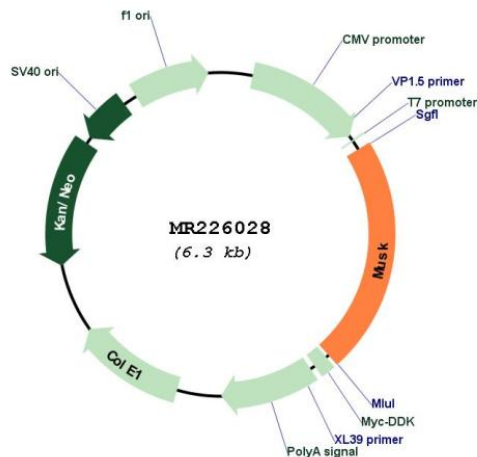
MRELVNIPLLQMLTLVAFSGTEKLPKAPVITTPLETVDALVEEVATFMCAVESYPQPEISWTRNKILIKL
 FDTRYSIRENGQLLILSVEDSDDGIYCCIANNGVGGAVESCGALQVKMKPKITRPPINVKIIEGLKAVL
 PCTTMGNPKPSVSWIKGDNALRENSRIAVLESGSLRIHNVQKEDAGQYRCVAKNSLGTAYSKLVKLEVEV
 FARILRAPESHNVTFGSFVTLRCTAIGIPVPTISWIENAVSSGSIQESVKDRVIDSRLQLFITKPLY
 TCIATNKHGEKFSTAKAAATVSIAEWSKSQKDSQGYCAQYRGEVCDAVLAKDALVFNNTSYRDPEDAQEL
 LIHTAWNELKAVSPLCRPAEALLCNHLFQECSPGVVPTPMPICREYCLAVKELFCAKEWQAMEGKAHRG
 LYRSGMHLLPVPECSKLPMSHRDPTACTRLPYLGNKEVPPDFGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001165996

ORF Size: 1392 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_001165996.1](#), [NP_001159468.1](#)

RefSeq Size: 1747 bp

RefSeq ORF: 1395 bp

Locus ID: 18198

Cytogenetics: 4 31.87 cM

MW: 51.4 kDa

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]