

## Product datasheet for **MR226300**

### Musk (NM\_010944) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Musk (NM_010944) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Musk
Synonyms:	Mdk4; Mlk; Ns; Nsk1; Nsk2; Nsk3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226300 representing NM\_010944  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGAGAGCTTGTCAACATTCCACTGTTACAGATGCTCACCTGGTTGCCTTCAGCGGGACTGAGAAAC  
 TTCAAAAAGCCCTGTCATCACCACGCCTTTGAACTGTAGATGCCTTGTTGAAGAAGTAGCGACTTT  
 CATGTGTGCCGTGGAATCCTACCCTCAGCCGAGATTTCTTGACCAGAAATAAAATTCTCATTAAGCTG  
 TTTGACACCCGCTACAGCATCCGGGAGAATGGTCAGCTCCTCACCATTCTGAGCGTGAAGACAGTGATG  
 ATGGCATCTACTGCTGCATAGCCAACAATGGAGTGGGAGGAGCCGTGGAGAGTTGGTGGCCCTGCAAGT  
 GAAGATGAAACCTAAAATAACTCGTCTCCATTAATGTAAAAATAATAGAGGGATTGAAGGCAGTTCTG  
 CCGTGCCTACGATGGTAACCCCAAACCATCTGTGCTGGATCAAGGGGGACAATGCTCTCAGGGAAA  
 ATTCAGAAATCGAGTTCTTGAATCTGGGAGCTTAAGGATCCATAATGTGCAAAAGGAAGATGCAGGACA  
 GTACCGCTGTGTGCCAAAACAGCCTGGGCACAGCTTACTCAAACCTGGTGAAGCTGGAAGTGGAGGTT  
 TTTGCAAGAATCCTGCGTCTCCTGAATCCACAATGTCACCTTTGGTTCTTTGTAACCCACGCTGCA  
 CAGCAATAGGCATCCCTGTCCCAACCATCAGCTGGATTGAAAACGGAAATGCTGTTTCTTCAGGTTCCAT  
 TCAAGAGAGTGTGAAAGACCGAGTGATTGACTCAAGACTCCAGCTCTTCATCACAAAGCCAGGACTCTAC  
 ACATGCATAGCTACCAATAAGCACGGAGAAAAGTTCAAGTACCGCAAAGGCTGCAGCCACTGTCAGCATAG  
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 AGTCTGGCGAAAGATGCTCTTGTCTTCTCAACACCTCCTACCGGACCCCGAGGACGCCAGGAGCTG  
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 GTCCTCCAGGCGAGCGCGGACATTCCAACCTGCCTGCCTCCACCTCTTCTTTGCCGTCTCGCTGCG  
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 TCTATTGCTGCCAAGGAGGAAAGAATGGAAAAATAAGAAAAGAGAGTGCACCGCGGTGACCCTCACCAC  
 GTTGCCTCCGAGCTCCTGCTGGATAGGCTCCATCCCAACCCATGTACCAGAGGATGCCACTCCTTCTG  
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 GAGTTTGACAACCCCAACATTGTGAAACTCTTAGGTGTGTGTGCCGTTGGGAAGCCGATGTGTCTGCTCT  
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 GAACATCTATTCGAGACTACTACAAAGCTGATGGAAATGACGCCATCCCTATCCGCTGGATGCCGCC  
 GAGTCTATCTTACAACCGCTACACCACTGAGTCGGATGTATGGGCCTATGGTGTGGTCTCTGGGAGA  
 TCTTCTCTATGGGCTGCAGCCCTACTATGGAATGGCCACGAGGAGGTCAATTTACTATGTGAGAGATGG  
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 GAACGGTGGGTGTC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226300 representing NM\_010944  
 Red=Cloning site Green=Tags(s)

MRELVNIPLLQMLTLVAFSGTEKLPKAPVITTPLETVDALVEEVATFMCAYVESYPQPEISWTRNKILIKL  
 FDTRYISIRENGQLLTILSVEDSDDGIYCCIANNGVGGAVESCGALQVKMKPKITRPPINVKIEGLKAVL  
 PCTTMGNPKPSVSWIKGDNALRENSRIAVLESGSLRIHNVQKEDAGQYRCVAKNSLGTAYSKLVKLEVEV  
 FARILRAPESHNVTFGFSVTLRCTAIGIPVPTISWIENGNVSSGSIQESVKDRVIDSRLQLFITKPGLY  
 TCIATNKHGEKFKSTAKAAATVSIAEWSKSQKDSQGYCAQYRGEVCDAVLAKDALVFFNTSYRDPEDAQEL  
 LIHTAWNELKAVSPLCRPAAEALLCNHLFQECSPGVVPTPMPICREYCLAVKELFCAKEWQAMEGKAHRG  
 LYRSGMHLLPVPECSKLPMSHRDPTACTRLPYLDYKKNITTFPSITSSRPSADIPNLPASTSSFAVSPA  
 YSMTVIIISIVSSFALFALLTIATLYCCRRRKEWKNKKRESTAVLTTLTLPSELLDRLHPNPMYQRMPLLL  
 NPKLLSLEYPRNNIEYVRDIGEGAFGRVFQARAPGLLPYEPFTMVAVKMLKEEASADMQADFQREAAALMA  
 EFDNPNIVKLLGCAVGMKPMCLLFEYMAVDLNEFLRSMSPHTVCSLSHSDLSTRARVSSPGPPPLSCAE  
 QLCIARQVAAGMAYLSERKFVHRDLATRNCLVGETMVVKIADFGLSRNIYSADYKADGNDAIPIRWMP  
 ESIFYNRYTTESDVWAYGVVLWEIFSYGLQPYGMAHEEVIYYVRDGNILACPENCLELYNLMRLCWSK  
 LPADRPSFCSIHRILQRMCEAEGTVGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

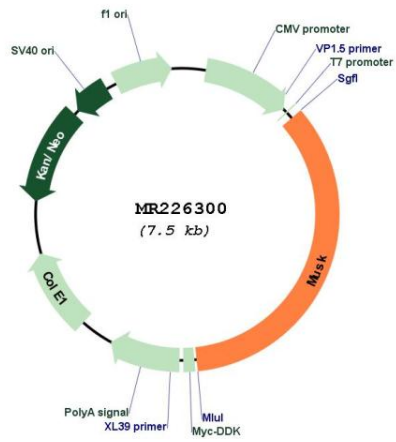
Sgfl-MluI

Cloning Scheme:



<b>ACCN:</b>	NM_010944
<b>ORF Size:</b>	2604 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_010944.2</a> , <a href="#">NP_035074.2</a>
<b>RefSeq Size:</b>	3354 bp
<b>RefSeq ORF:</b>	2607 bp
<b>Locus ID:</b>	18198
<b>UniProt ID:</b>	<a href="#">Q61006</a>
<b>Cytogenetics:</b>	4 31.87 cM
<b>MW:</b>	97.1 kDa
<b>Gene Summary:</b>	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 MR226300