

## Product datasheet for **MG226026**

### Musk (NM\_001037127) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Musk (NM_001037127) 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:**

>MG226026 representing NM\_001037127  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGAGAGCTTGTCAACATTCCACTGTTACAGATGCTCACCTGGTTGCCTTCAGCGGGACTGAGAAAC  
 TTCAAAAAGCCCTGTCATCACCACGCCTTTGAACTGTAGATGCCTTGTTGAAGAAGTAGCGACTTT  
 CATGTGTGCCGTGGAATCCTACCCTCAGCCGAGATTTCTTGACCAGAAATAAAATTCTCATTAAGCTG  
 TTTGACACCCGCTACAGCATCCGGGAGAATGGTCAGCTCCTCACCATTCTGAGCGTGAAGACAGTGATG  
 ATGGCATCTACTGCTGCATAGCCAACAATGGAGTGGGAGGAGCCGTGGAGAGTTGTGGTCCCTGCAAGT  
 GAAGATGAAACCTAAAATAACTCGTCTCCATTAATGTAATAAATAGAGGGATTGAAGGCAGTTCTG  
 CCGTGCCTACGATGGTAACCCAAACCATCTGTGCTGGATCAAGGGGGACAATGCTCTCAGGGAAA  
 ATTCAGAAATCGAGTTCTTGAATCTGGGAGCTTAAGGATCCATAATGTGCAAAAGGAAGATGCAGGACA  
 GTACCGCTGTGTGCCAAAAACAGCCTGGGCACAGCTTACTCAAACCTGGTGAAGCTGGAAGTGGAGGAA  
 GACAGAGAACCTGAGCAGGACGCTAAAGTTTTTGCAAGAATCCTGCGTGCCTGAAATCCACAATGTCA  
 CCTTTGGTTCTTTGTAACCCTACGCTGCACAGCAATAGGCATCCCTGTCCCCACCATCAGCTGGATTGA  
 AAACGGAAATGCTGTTTCTTTCAGGTTCCATTCAAGAGAGTGTGAAAGACCGAGTGATTGACTCAAGACTC  
 CAGCTCTTCATCACAAGCCAGGACTCTACATGCATAGCTACCAATAAGCACGGAGAAAAGTTTCAGTA  
 CCGCAAAGGCTGCAGCCACTGTCAGCATAGCAGTCCCTCCTCCGTGGTTTTCTATGGATACTTCTTTCT  
 ATGGACAGAATGGAGTAAGTCACAGAAAGACAGCAAGGCTACTGTGCCAGTACAGAGGGGAGGTGTGT  
 GATGCAGTCTGGCGAAAGATGCTCTTGTCTTCTCAACACCTCCTACCGGGACCCCGAGGACGCCAGG  
 AGCTGTGATCCACACTGCGTGGAAATGAGCTGAAGGCTGTGAGTCCACTGTGCCGGCCAGCTGTGAGC  
 TCTGCTGTGTAACCACCTCTTCCAAGAGTGCAGCCCTGGAGTGGTACCTACTCCATGCCCATTTGCAGA  
 GAGTACTGCCTGGCGGTAAGGAGCTCTTCTGTGCAAAGGAATGGCAGGCAATGGAAAGAAAGGCCACC  
 GGGCCTCTACAGATCTGGGATGCATCTCCTTCCGGTACCAGAGTGCAGCAAGCTTCCCAGCATGCACCG  
 GGACCCACAGCCTGCACAAGACTGCCATATTTAGATTATAAAAAAGAAAACATAACAACATTCCCGTCA  
 ATAACGTCTCCAGGCCGAGCGCGGACATTCCAAACCTGCCTGCCTCCACCTCTTCTTTGCCGTCTCGC  
 CTGCGTACTCCATGACCGTCATCATCTCCATCGTGTCCAGCTTTGCCCTGTTTGTCTTCTCACCATCGC  
 TACTCTCTATTGCTGCCAAGGAGGAAAGAATGGAAAAAATAAGAAAAGAGAGTGCACCGCGGTGACCCTC  
 ACCACGTTGCCTCCGAGCTCCTGCTGGATAGGCTCCATCCCAACCCCATGTACCAGAGGATGCCACTCC  
 TTCTGAATCCTAAGTTGCTCAGCCTGGAGTATCCGAGGAATAACATTGAGTATGTCCGAGACATCGGAGA  
 GGGGGCGTTTGAAGAGTCTTCCAAGCAAGGGCCCTGGCTTGCTGCCTTATGAACCTTTCACTATGGTG  
 GCCGTGAAGATGCTTAAGGAAGAGGCCTCTGCAGACATGCAAGCGGACTTTCAGAGGGAGGCGGCCCTCA  
 TGGCAGAGTTTGACAACCCCAACATTGTGAAACTCTTAGGTGTGTGTGCCGTTGGGAAGCCGATGTGTCT  
 GCTCTTTGAATATATGGCCTATGGTGACCTCAATGAGTTCTCCGAAGTATGTCCCGCACACTGTTTGC  
 AGCCTCAGCCACAGTGACCTGTCCACGAGGGCTCGGGTGTCTAGCCCTGGTCTCCACCACTGCTCTGTG  
 CAGAACAGCTCTGCATTGCCAGGCAGGTGGCAGCTGGCATGGCTACCTTTCAGAGCGCAAGTTTGTCCA  
 CCGGACTTAGCTACCAGGAAGTGCCTGGTTGGGGAGACCATGGTGGTAAAAATTGCAGACTTTGGCCTC  
 TCCAGGAACATCTATTCCGAGACTACTACAAAGCTGATGGAAATGACGCCATCCCTATCCGGATGC  
 CGCCCGAGTCTATCTTCTACAACCCTACACCACTGAGTCGGATGTATGGGCTATGGTGTGGTCTCTG  
 GGAGATCTTCTCCTATGGGCTGCAGCCCTACTATGGAATGGCCACGAGGAGGTCAATTTACTATGTGAGA  
 GATGGCAACATCCTCGCCTGCCCTGAGAACTGCCCTTGGAACTGTACAACCTCATGCGCCTGTGTGGAA  
 GCAAGCTGCTGCTGATAGACCCAGCTTCTGCAGTATCCACAGGATCCTGCAGCGCATGTGCGAGAGAGC  
 AGAGGGAACGGTGGGTGTC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – **GTTTAA**

**Protein Sequence:** >MG226026 representing NM\_001037127  
 Red=Cloning site Green=Tags(s)

MRELVNIPLLQMLTLVAFSGTEKLPKAPVITTPLETVDALVEEVATFMCAVESYPQPEISWTRNKILIKL  
 FDTRYSIRENGQLLTILSVEDSDGIYCCIANNGVGGAVESGALQVKMKPKITRPPINVKIEGLKAVL  
 PCTTMGNPKPSVSWIKGDNALRENSRIAVLESGSLRIHNVQKEDAGQYRCVAKNSLGTAYSKLVKLEVEE  
 DREPEQDAKVFARILRAPESHNVTFGSFVTLRCTAIGIPVPTISWIENGNVSSGSIQESVKDRVIDSRL  
 QLFITKPLYTCIATNKHGEKFSTAKAAATVSIIVPPPWFSDTSFLWTEWSKSQKDSQGYCAQYRGEVC  
 DAVLAKDALVFFNTSYRDPEDAQELLIHTAWNELKAVSPLCRPAEALLCNHLFQECSPGVVPTPMPICR  
 EYCLAVKELFCAKEWQAMEGKAHRGLYRSGMHLLPVPECSKLPMSHRDPTACTRLPYLDYKKNITTFPS  
 ITSSRPSADIPNLPASTSSFAVSPAYSMTVIISIVSSFALFALLTIATLYCRRRKEWKNKKREAVTL  
 TTLPESELLDRLHPNPMYQRMPLLLNPKLLSLEYPRNNIEYVRDIGEGAFGRVFQARAPGLLPYEPFTMV  
 AVKMLKEEASADMQADFQREAAALMAEFDNPNIVKLLGCAVKGPMCLLFEYMAVGDLNEFLRMSPHTV  
 SLSHSDLSTRARVSSPGPPPLSCAEQLCIARQVAAGMAYLSERKFVHRDLATRNCLVGETMVVKIADFL  
 SRNIYSADYYKADGNDAIPIRWMPPEIFYNRYTTESDVWAYGVVLEIFSYGLQPYYGMAHEEVIYVYR  
 DGNILACPENCPLLELYNLMRLCWSKLPADRPSFCSIHRILQRMCEAEGTVGV

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

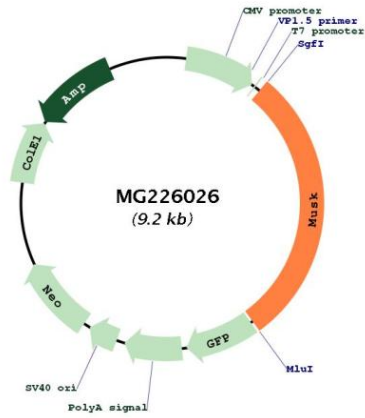
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



<b>ACCN:</b>	NM_001037127
<b>ORF Size:</b>	2679 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<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_001037127.2</a> , <a href="#">NP_001032204.2</a>
<b>RefSeq Size:</b>	3422 bp
<b>RefSeq ORF:</b>	2682 bp
<b>Locus ID:</b>	18198
<b>Cytogenetics:</b>	4 31.87 cM
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for MG226026