

## Product datasheet for **MG207671**

### **Kmo (NM\_133809) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kmo (NM_133809) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kmo
Synonyms:	AI046660
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207671 representing NM\_133809  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCATCGTCTGATACTCAGGGGAAAAGAGTGGCTGTTATTGGCGGTGGTTTGGTGGAGCACTGAATG  
 CCTGCTTTCTTGCAAAGAGGAATTTTCAAGTTGATGTGTACGAAGCTAGGGAAGATATTCGCGTGGCTAA  
 ATCTGCACGTGGAAGGAGCATTAACTTGGCCCTTTCTTATAGAGGACGGCAGGCCTTGAAAGCCATTGGT  
 CTGGAAGATCAGATCGTTTCAAAGGTGTGCCATGAAAGCCAGAATGATCCACTCTTTTCGGGAAAGA  
 AGTCTGCAATTCCTATGGGAACAAGTCACAGTATATCCTTTCAATAAGCAGAGAAAACTTAAACAAGGA  
 CCTGCTGACTGCCGTGGAGTCTATGCCAATGCGAAGGTGCACCTTTGGCCACAAGCTGTCGAAATGCATT  
 CCGGAGGAAGGGTACTCACAGTCTCGGACCTGACAAGGTTCCCGAGATGTCACATGTGACCTTGTG  
 TAGGGTGTGATGGAGCCTATTCAACTGTCAGAGCCACCTCATGAAGAAGCCCGCTTTGATTACACTCA  
 GCAATATATCCCTCATGGATACATGGAGTTGACAATTCACCTAAGAATGGGGAGTACGCCATGGAACCT  
 AACTGTCTTACATTTGGCCTAGAAATGCCTATATGATGATCGCCCTTCCAAACATGGACAAATCTTTCA  
 CATGCACCTTGTTCATGCCCTTTGAGGAGTTTGAAGACTTCCAACGCGCAGCGATGTGCTGGACTTCTT  
 CCAGAAGAACTTTCCAGATGCTATCCCTCTGATGGGAGAGCAAGCCCTCATGAGAGATTTCTTTCTGTTG  
 CCTGCCAGCCCATGATATCAGTGAAGTCTCTCCCTTCCACCTGAAGTCACACTGTGTGCTGATGGGAG  
 ATGCCGCTCATGCCATTGCCCATTTTTGGGCAAGGAATGAATGCGGGCTTTGAAGACTGCTTGGTGT  
 TGATGAATTGATGGACAAATTCATAATAATCTTAGTATGTGCCTTCTGAATTCTCAAGATTTAGGATC  
 CCAGATGACCATGCAATTCAGACCTATCTATGTACAATTACATAGAGATGCGAGCGCATGTCAACTCTA  
 GTGGTTCCTGTTCCAAAAGCTCCTGGATAAATTTCTTACGCGATCATGCCCTTACCTTATCCCTCT  
 CTATACCATGGTGCCTTACCAGAATAAGATACCACGAGGCAAGTGTGCGTTGGCATTGGCAAAAAAAG  
 GTGATAAACAGAGGACTCTTTGTCCTTGGTCCCTGATAGCCATTGGAGGCACCTACCTACTTGTGCACC  
 ATCTGTCCCTGAGACCTCTGGAGTTCTTGAGAAGACCTGCCTGGATGGGAACCACTGGCTACTGGACTAG  
 GAGTACAGACATTTCTCTGCAAGTTCATGGAGTTAC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207671 representing NM\_133809  
 Red=Cloning site Green=Tags(s)

MASSDTQKRVAVIGGGLVGNACFLAKRNFQVDVYEAREDIRVAKSARGRSINLALSYRGRQALKAIG  
 LEDQIVSKGVPMKARMIHLSGKKSAPIYGNKSQYILSISRENLNKDLLTAVESYANAKVHFGHLSKCI  
 PEEGVLTVLGPDKVPRDVTCDLVVGC DGAYSTVRAHLMKKPRFDYTQYIPHYMELTIPPKNGEYAMEP  
 NCLHIWPRNAYMMIALPNMDKSFCTLFMPFEFERLPTRSDVLDFFQKNFPDAIPLMGEQALMRDFFLL  
 PAQPMISVKCSPFHLKSHCVLMGDAAHAIVPPFGQGMNAGFEDCLVFDELMDFNNSMCLPEFSRFRI  
 PDDHAISDL SMYNYIEMRAHVNSRWFLFQKLLDKFLHAI MPSTFIPLYTMVAFTRIRYHEAVLRWHWQKK  
 VINRGLFVLGSLIAIGGTYLLVHLSLRPLEFLRRPAWMGTTGYWTRSTDISLQVPWSY

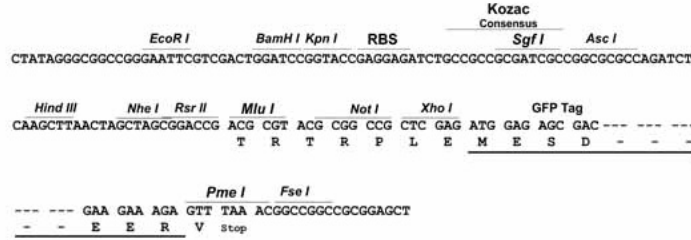
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

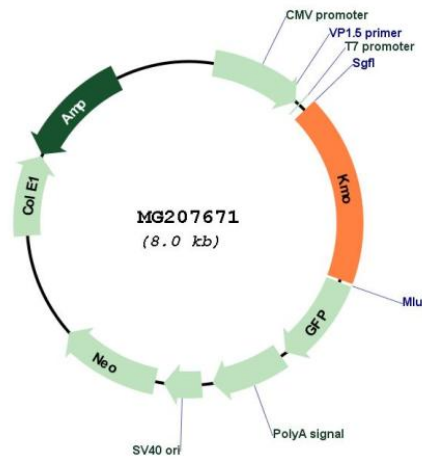
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_133809  
 ORF Size: 1437 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_133809.1</a> , <a href="#">NP_598570.1</a>
<b>RefSeq Size:</b>	2512 bp
<b>RefSeq ORF:</b>	1440 bp
<b>Locus ID:</b>	98256
<b>UniProt ID:</b>	<a href="#">Q91WN4</a>
<b>Cytogenetics:</b>	1 H3
<b>Gene Summary:</b>	Catalyzes the hydroxylation of L-kynurenine (L-Kyn) to form 3-hydroxy-L-kynurenine (L-3OHKyn). Required for synthesis of quinolinic acid, a neurotoxic NMDA receptor antagonist and potential endogenous inhibitor of NMDA receptor signaling in axonal targeting, synaptogenesis and apoptosis during brain development. Quinolinic acid may also affect NMDA receptor signaling in pancreatic beta cells, osteoblasts, myocardial cells, and the gastrointestinal tract.[UniProtKB/Swiss-Prot Function]