

## Product datasheet for **MG208790**

### **Gk2 (NM\_010294) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gk2 (NM_010294) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gk2
Synonyms:	Gk-rs2; GKTA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208790 representing NM\_010294  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCAGCCTCGAAGCAAACCTCTGCGGGACCGTTGGTAGGAGCGGTGGTCCAGGGAACCAACTCCACTC  
 GCTTTCTAGTTTTCAATAGCAAAACAGCAGAAGCTAGTTTCTCATCAGGTGGAAGTACACAAGAATA  
 CCCAAAAGAAGGATGGGTGGAGCAAGACCCCAAGGAAATCCTTAAATCTGTCTATGAGTGATAGCGAAA  
 GCTTGTGAAAACTTGCTGAAGTGAACATTGATATTTCCAACATTAAGCTATCGGCGTGAGTAACCAGC  
 GGGAAACCACTGTGGTCTGGGACAAGTTCACGGGAGACCCCTGTACAATGCCGTGGTGGCTTGTATCT  
 CAGAACCAGTCTACTGTGGAGACTCTCACTAAGAAAATCCAGGAAATAGCAACTTTGTCAAGTCTAAG  
 ACCGGCCTTCTTCTAGCACTTACTTCAGTGTGTGAAGCTGCGGTGGATGCTGGACAACCTAAGACCCA  
 TTCAAAGGCTGTTGAGGAAGGCAGAGCCATGTTTGAACCATCGACTCTTGGCTCATCTGGTGTATGAC  
 CGGAGGAGTCAATGGAGGCATCCATTGCACCGATGTAACAAATGCATGCAGAACGATGCTTTTTAACATC  
 CACTCTTTGGAATGGGATAAAGATCTCTGTGACTTTTTTGAATTCCAATGAGCATCTCCCAAATGTAT  
 GCAGTTCTTCTGAGATCTATGGCCTGATGACATCAGGGGCCTTGAAGGCGTGCCAAATCTGGATGTT  
 GGGGGATCAGTCTGCTGCTTTAGTGGGACAAATGTGTTCCATGAAGGTCAAGCCAAAAACATACGGA  
 ACAGGCTGTTTTTACTATGTAATACAGGCCAGAAATGTGTGTTTCTGAACATGGCCTTCTGACCACAT  
 TGGCTTACAACTAGGCCAAAAAAGCCAGTTTTTATGCCTTAGAAGGTTCTGTTGCTATAGCTGGTGC  
 TGTTATTCGCTGGCTAAGAGACAATTTGCAAAATATAACAACCTCAGGGGAAGTTGAAAACTTGAAGA  
 CAGGTAGGCATTCCTATGGCTGCTACTTTGCCAGCCTTTTCGGGGCTGTATGCACCTTACTGGGAAC  
 CCAGTCCAAGAGGATAATCTGTGGTCTCACTCAGTTCACCAACAAATGCCATATTGCCCTTGTGCGT  
 AGAAGCTGTTTTGTTTCCAACCCGAGAGATTTTGGATGCCATGAATCGCGACTGTGGAATTCCACTCAGT  
 CATTTCAGGTCGATGGAGGAATGACCAACAACAGGATTCTTATGCAGCTACAGGAGATATTCTGCACA  
 TTCCGGTAGTTAAGTCTGTATGCCTGAAACGACGGCCCTGGGAGCTGCCATGGCAGCCGGAGCTGCAGA  
 AGGGGTAATGTTGGAGTCTTGAACCTGAAGATTTGTCTACGATCTTGATGGAACGATATGAACCACAA  
 ATCCAAGCCACAGAGAGTAAATTCGTTTTTCAACATGGAAGAGAGCAGTATGAAGTCAATGGGTTGGG  
 TTACAGCAAAGGACCCTGAAAAATGGCGATAACCCTGTCTTCTTGTCTGCCCTTGGGTTTTTTTATAGT  
 GAGTAGCATGACGTTATTAATTGGAGCAAGATGTGTCTCAACTGCTGAAGAG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG208790 representing NM\_010294  
 Red=Cloning site Green=Tags(s)

MAASKQTSAGPLVGAVVQGTNSTRFLVFNASKTAELVCSHQVELTQEYPKEGWVEQDPKEILKSVYECIAK  
 ACEKLAEVNIDISNIKAIIGVSNQRETTVVWDKFTGDPLYNNAVWLDLRTQSTVETLTKKIPGNSNFVSKS  
 TGLPLSTYFSAVKLRWMLDNLRP IQKAVEEGRAMFGTIDSWLIWCMTGGVNGGIHCTDVTNACRMLFNI  
 HSLEWDKDLCDFFEIPMSILPNVCSSEIYGLMTSGALEGVPI SGCLGDQSAALVGMCFHEGQAKNTYG  
 TGCFLLCNTGQKCVFSEHLLTTLAYKLGKNKPVFYALEGSVAIAGAVIRWLRDNFEIITTSGEVENLAR  
 EVGTSYGCYFVPAFSGLYAPYWEPSARGIICGLTQFTNKCHIAFAALEAVCFQTREILDAMNRDCGIPLS  
 HLQVDGGMTNRRILMQLQADILHIPVVKSVMPETTALGAAMAAGAAEGVNVWSLEPEDLSTILMERYEPQ  
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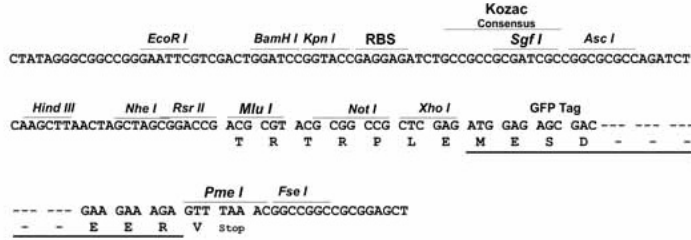
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

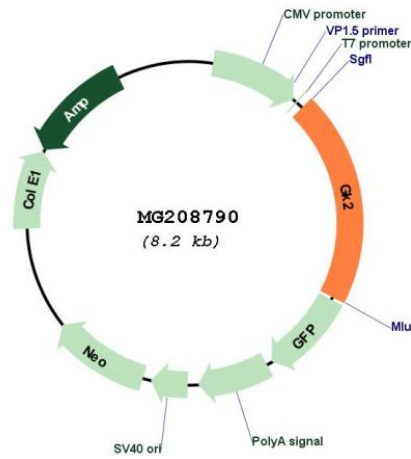
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_010294
<b>ORF Size:</b>	1662 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_010294.2</a>
<b>RefSeq Size:</b>	1848 bp
<b>RefSeq ORF:</b>	1665 bp
<b>Locus ID:</b>	14626
<b>UniProt ID:</b>	<a href="#">Q9WU65</a>
<b>Cytogenetics:</b>	5 47.71 cM
<b>Gene Summary:</b>	Key enzyme in the regulation of glycerol uptake and metabolism.[UniProtKB/Swiss-Prot Function]