

## Product datasheet for **MG217229**

### **Ryk (NM\_001042607) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ryk (NM_001042607) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ryk
Synonyms:	AW536699; ERK-3; Vik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG217229 representing NM\_001042607  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGCGCGGGCCGGGGCGCGTCCCGGGAGCGCGGCCTGAGGGCCCCGCCCGCCGCTGCTGCTGC  
 TGCTGCTGGCGATGCTGCCCGCCGCCGCCCGCGTCCCGGCCCTGGCCGCCGCTCCTGCGGGACCCAG  
 CGTGAGCCTCTACCTGAGCGAGGACGAGGTGCGCCGGCTGCTTGGTCTTGATGCAGAGCTTTACTATGTG  
 AGAAATGACCTCATCAGTCACTACGCTCTGCTCTTAACTGCTAGTGCCAGTGAGACAAACTTCTGC  
 ACTTCACTGGCATGCAAAGTCCAAGTTGAATATAAGCTGGGATTCCAAGTAGACAACCTTTGTGGCTAT  
 GGGCATGCCCCAGGTCAATATTTCTGCTCAAGGGGAGTCCCACGCATTTATCAGTGTTTCGGGTCGAG  
 CTTTCTGTACCGCAAAGTCGACTCTGAAGTCATGATTCTAATGCAGCTCAATCTGACAGTGAATTCCT  
 CAAAAATTTTACAGTTTTAAATTTTAAACGAAGGAAAATGTGCTACAAAAACTGAAGAAGTAAAAAC  
 TTCAGCCTTGACAAAAACTAGCAGAACTATTTATGACCCTGTCCATGCAGCGCAACGACTTCCAGC  
 CGTGTGTTTTACATCAGTGTAGGGGTTTCTGTGCAAGTATTTCTTGTAGCAATAATATTAGCCGTTT  
 TGCACCTTCATAGCATGAAAAGGATTGAACTGGATGACAGCATCAGCGCCAGCAGTAGTCCCAGGGCT  
 GTCTCAGCCGTCTACCCAGACGACCCAGTATCTGAGAGCTGACACACCCAACAATGCAACGCCTATCACC  
 AGTTATCTACCTTGGGATAGAGAAGAAGCAGTTCGGAAGTGTCACTCTTCTGGAAGCCAAAGCCAAGG  
 TGAAGGATATCGCAATATCCAGAGAAAGGATCACACTGAAAGATGTCTCCAAGAAGGACTTTTGGGCG  
 TATTTCCATGGGATTTAGTAGATGAAAAGATCCAAATAAAGAGAAGCAAACATTTGTAACAAAGTT  
 AAAGACCAAGCATCTGAAGTTCAGGTGACGATGATGCTCACCGAGAGTGCAAGCTTCGAGGTCTGCACC  
 ACAGAACTCCTTCTATTACTCATGTGTCATAGAAGAAGGAGAAAAGCCCATGGTGGTATTGCCATA  
 CATGAATTGGGGGAATCTTAAATTTTCTCGGCAAGTCAAAATTAGTAGAAGCCAATAATCCACAGGCA  
 ATTTCCAGCAAGATCTGGTCCATATGGCTATTAGATTGCTGCGGGATGAGCTACCTGCGAGGAGAG  
 AAGTGATCCATAGAGACCTGGCTGCTAGGAACTGTGTCATCGACGACACTCTCAAGTCAAGATCACAGA  
 CAATGCCCTTTCCAGAGACTTGTTCCTATGGACTACCACTGCCTAGGGGACAACGAGAACAGGCCAGTG  
 AGATGGATGGCTCTGAAAGTCTGGTTAATAATGAGTTCTCTAGTGCTAGTGACGTGTGGCCTTTGGAG  
 TGACGCTGTGGGAGCTCATGACTCTGGCCAGACGCCCTACGTGGACATCGACCCTTTGAGATGGCCGC  
 TTACCTGAAAGATGGTTACCGAATAGCCAGCCAATCACTGCCCTGATGAACTGTTTGTGTGATGGCC  
 TGTGCTGGGCTTGGACCCTGAGGAGAGGCCTAAGTTCCAGCAGCTGGTCCAGTGCCTCACAGAGTTCC  
 ACGCTGCCCTGGGAGCCTACGTC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG217229 representing NM\_001042607  
 Red=Cloning site Green=Tags(s)

MRAGRGGVPGSGGLRAPPPLLLLLLAMLPAAPRSPALAAAPAGPSVSLYLSEDEVRRLLGLDAELYYV  
 RNDLISHYALSFNLLVPSETNFLHFTWHAKSKVEYKLGQVDFVAMGMPQVNI SAQGEVPRTLSVFRVE  
 LSCTGKVDSEVMILMQLNLTVNSSKNFTVLNFKRRKMCYKLEEVKTSALDKNTRSRTIYDPVHAAPTST  
 RVFYISVGVCCAVIFLVAIILAVLHLHSMKRIELDDSISSSSQGLSQPSTQTTQYLRADTPNNATPIT  
 SYPTLRIEKNDLRSVTLLEAKAKVKDIAISRERITLKDVLQEGTFGRIFHGILVDEKDPNKEKQTFVKTV  
 KDQASEVQVTMMLTESCKLRGLHHRNLLPITHVCIIEGEKPMVVL PYMNWGNLKLFLRQCKLVEANNPQA  
 ISQQDLVHMAIQIACGMSYLARREVIHRDLAARNCVIDDTLQVKITDNALSRDLFPMDYHCLGDNENRPV  
 RWMALSLVNNEFSSASDVWAFGVTLWELMTLQTPYVDIDPFEMAAYLKDGRI AQPINCPDELFAVMA  
 CCWALDPEERPKFQQLVQCLTEFHAALGAYV

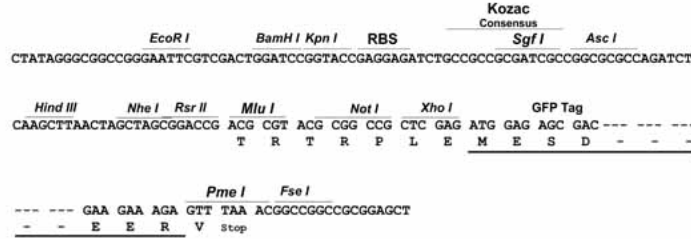
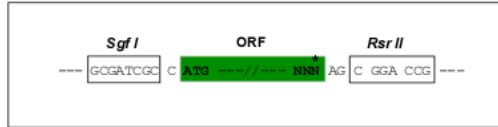
SGP**TRRRLE** - GFP Tag - V

**Restriction Sites:**

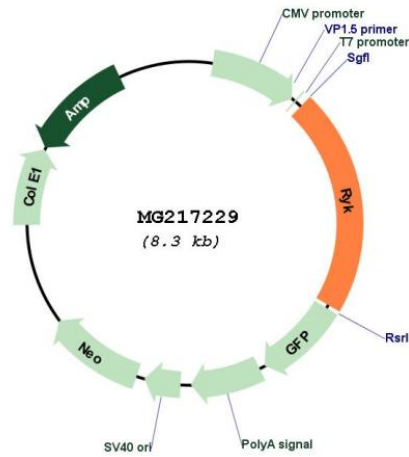
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM\_001042607

ORF Size: 1773 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_001042607.1</a> , <a href="#">NP_001036072.1</a>
<b>RefSeq Size:</b>	3258 bp
<b>RefSeq ORF:</b>	1776 bp
<b>Locus ID:</b>	20187
<b>UniProt ID:</b>	<a href="#">Q01887</a>
<b>Cytogenetics:</b>	9 54.72 cM
<b>Gene Summary:</b>	May be a coreceptor along with FZD8 of Wnt proteins, such as WNT1, WNT3, WNT3A and WNT5A. Involved in neuron differentiation, axon guidance, corpus callosum establishment and neurite outgrowth. In response to WNT3 stimulation, receptor C-terminal cleavage occurs in its transmembrane region and allows the C-terminal intracellular product to translocate from the cytoplasm to the nucleus where it plays a crucial role in neuronal development. [UniProtKB/Swiss-Prot Function]