

Product datasheet for **MR215644**

Ryk (NM_013649) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ryk (NM_013649) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ryk
Synonyms:	AW536699; ERK-3; Vik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR215644 representing NM_013649
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGCGCGGGCCGGGGCGGCTCCCGGGAGCGCGGCCTGAGGGCCCCGCCGCCGCTGCTGCTGC
 TGCTGCTGGCGATGCTGCCCGCCGCCGCCCGCGTCCCCGGCCCTGGCCGCCGCTCCTGCGGGACCCAG
 CGTGAGCCTCTACCTGAGCGAGGACGAGGTGCGCCGGCTGCTTGGTCTTGATGCAGAGCTTTACTATGTG
 AGAAATGACCTCATCAGTCACTACGCTCTGCTCTTAACTGCTAGTGCCAGTGAGACAACTTCTCGC
 ACTTCACTTGGCATGCAAAGTCCAAGGTTGAATATAAGCTGGGATTCCAAGTAGACAACCTTTGTGGCTAT
 GGGCATGCCCCAGGTCAATATTTCTGCTCAAGGGGAGTCCCACGCATTTATCAGTGTTTCGGGTCGAG
 CTTTCTGTACCGCAAAGTCGACTCTGAAGTCATGATTCTAATGCAGCTCAATCTGACAGTGAATTCCT
 CAAAAATTTTACAGTTTTAAATTTTAAACGAAGGAAAATGTGCTACAAAAACTTGAAGAAGTAAAAAC
 TTCAGCCTTGGACAAAAACTAGCAGAACTATTTATGACCTGTCCATGCAGCGCAACGACTTCCAGC
 CGTGTGTTTTACATCAGTGTAGGGGTTTGTGTGCAAGTATTTCTTGTAGCAATAATATTAGCCGTTT
 TGCACCTTCATAGCATGAAAAGGATTGAACTGGATGACAGCATCAGCGCCAGCAGTAGTCCCAGGGGCT
 GTCTCAGCCGTCTACCCAGACGACCCAGTATCTGAGAGCTGACACACCCAACAATGCAACGCCTATCACC
 AGCTCCTCAGGTTATCCTACCTTGGGATAGAGAAGAAGGACTTGCAGAGTGTCACTCTTCTGGAAGCCA
 AAGCCAAGGTGAAGGATATCGCAATATCCAGAGAAAGGATCACACTGAAAGATGTCTCCAAGAAGGTAC
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 AAAACAGTTAAAGACCAAGCATCTGAAGTTCAGGTGACGATGATGCTCACCAGAGAGCTGCAAGCTTCGAG
 GTCTGCACCACAGAAACCTCCTTCTTACTCATGTGTCATAGAAGAAGGAGAAAAGCCCATGGTGGT
 ATTGCCATACATGAATTGGGGGAATCTTAAATTATTTCTCGGCAGTGCAAATTAGTAGAAGCCAATAAT
 CCACAGGCAATTTCCAGCAAGATCTGGTCCATATGGCTATTCAGATTGCCTGCGGGATGAGCTACCTGG
 CGAGGAGAGAAGTATCCATAGAGACCTGGCTGTAGGAACTGTGTCATCGACGACACTCTTCAAGTCAA
 GATCACAGACAATGCCCTTCCAGAGACTTGTTCCTATGGACTACCACTGCCTAGGGGACAACGAGAAC
 AGGCCAGTGAGATGGATGGCTCTGGAAAGTCTGGTTAATAATGAGTCTCTAGTGTAGTACGCTGTGGG
 CCTTTGGAGTGACGCTGTGGGAGCTCATGACTCTGGCCAGACGCCCTACGTGGACATCGACCCCTTGA
 GATGGCCGCTTACCTGAAAGATGGTACCGAATAGCCAGCCAATCAACTGCCCTGATGAACTGTTTGT
 GTGATGGCCTGTGCTGGCCTTGACCCTGAGGAGAGGCCTAAGTTCAGCAGCTGGTCCAGTGCCTCA
 CAGAGTCCACGCTGCCCTGGGAGCCTACGTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR215644 representing NM_013649
 Red=Cloning site Green=Tags(s)

MRAGRGGVPGSGGLRAPPPLLLLLLAMLPAAPRSPALAAAPAGPSVSLYLSEDEVRRLLGLDAELYYV
 RNDLISHYALSFNLLVPSETNFLHFTWHAHAKSKVEYKLGFDVNFVAMGMPQVNIISAQGEVPRLSVFRVE
 LSCTGKVDSEVMILMQLNLTVNSSKNFTVLNFKRRKMCYKLEEVKTSALDKNTRTIYDPVHAAPTST
 RVFYISVGVCCAVIFLVAIILAVLHLHSMKRIELDDISASSSSQGLSQPSTQTTQYLRADTPNNATPIT
 SSSGYPTLRIEKNDLRSVTLLEAKAKVKDIAISRERITLKDVLQEGTFGRIFHGILVDEKDPNKEKQTFV
 KTVKDDQASEVQVTMMLTESCKLRGLHHRNLLPIHVCIEEGEKPMVPLPYMNWGNLKLFLRQCKLVEANN
 PQAISQQDLVHMAIQIACGMSYLARREVIHRDLAARNCVIDDTLQVKITDNALSRLFPMDYHCLGDNEN
 RPVRWMALESVNNEFSSASDVWAFVTLWELMTLQTPYVDIDPFEMAAYLKDGYRIAQPINCPDELFA
 VMACCWALDPEERPKFQQLVQCLTEFHAALGAYV

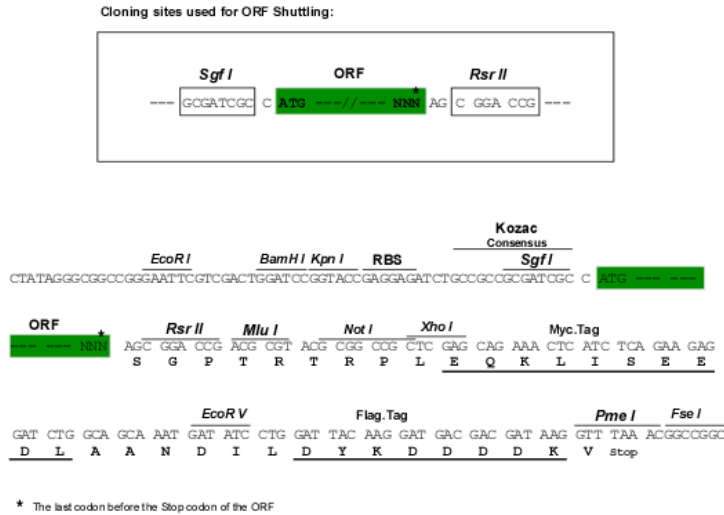
SGP**TRTRPLEQKLISEEDLAANDILDYKDDDDK**V

Chromatograms:

https://cdn.origene.com/chromatograms/ja2177_e10.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_013649

ORF Size: 1782 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: 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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

RefSeq: [NM_013649.3](#), [NP_038677.3](#)

RefSeq Size: 3267 bp

RefSeq ORF: 1785 bp

Locus ID: 20187

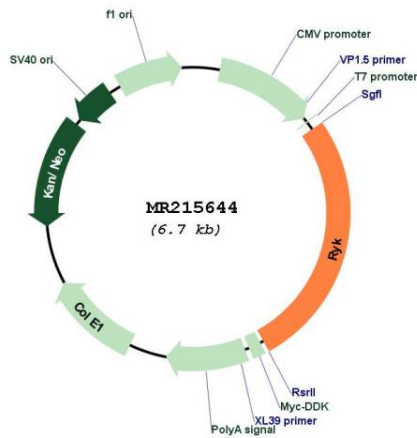
UniProt ID: [Q01887](#)

Cytogenetics: 9 54.72 cM

MW: 66.7 kDa

Gene Summary: 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]

Product images:



Circular map for MR215644