

Product datasheet for **RC215509**

RYK (NM_002958) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RYK (NM_002958) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RYK
Synonyms:	D3S3195; JTK5; JTK5A; RYK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC215509 representing NM_002958
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGTGGGGCGGCGCGCTGGGGCGGCCGGAGTTGCCTCCGGGGGCCCGCGCCTGAGGGCCC
 CGCCGCCGCCCGCTGCTGCTTCTGCTTGCCTGTTGCCGCTGCTGCCCGCCTGGCGCTGCCGCCGC
 CCCC GCCCGCGGCCCGGAGCTGCAGTCGGCTTCCGCGGGGCCAGCGTGAGTCTCTACCTGAGCGAG
 GACGAGGTGCGCCGGCTGATCGGTCTTGTATGCAGAACTTTATTATGTGAGAAATGACCTTATTAGTCACT
 ACGCTCTATCCTTAGTCTGTTAGTACCCAGTGAGACAAATTTCTGCACCTCACCTGGCATGCGAAGTC
 CAAGTTGAATATAAGCTGGGATTCCAAGTGGACAATGTTTTGGCAATGGATATGCCCCAGGTCAACATT
 TCTGTTACAGGGGAAGTCCACGCACCTTATCAGTGTTCGGGTAGAGCTTCTGTACTGGCAAAGTAG
 ATCTGAAGTTATGATACTAATGCAGCTCAACTTGACAGTAAATCTTCAAAAAATTTACCGTCTTAAA
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 GGGTTTGTGTGCAGTAATTTCTCGTAGCAATAATATTAGCTGTTTTGCACCTTCATAGTATGAAAAG
 GATTGAACTGGATGACAGCATTAGTGCCAGCAGTAGTTCCCAAGGGCTGTCTCAGCCATCCACCCAGACG
 ACTCAGTATCTGAGAGCAGACACGCCCAACAATGCAACTCCTATCACCAGTTATCCTACCTTGCGGATAG
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 TCTGGCCAGACTCCCTACGTGGACATTGACCCTTCGAGATGGCCGCATACCTGAAAGATGTTACCGA
 ATAGCCCAGCAATCACTGTCCTGATGAATTATTTGCTGTGATGGCCTGTTGCTGGGCCTTAGATCCAG
 AGGAGAGGCCCAAGTTTACGAGCTGGTACAGTGCCTAACAGAGTTTCATGCAGCCTGGGGCCTACGT
 C

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
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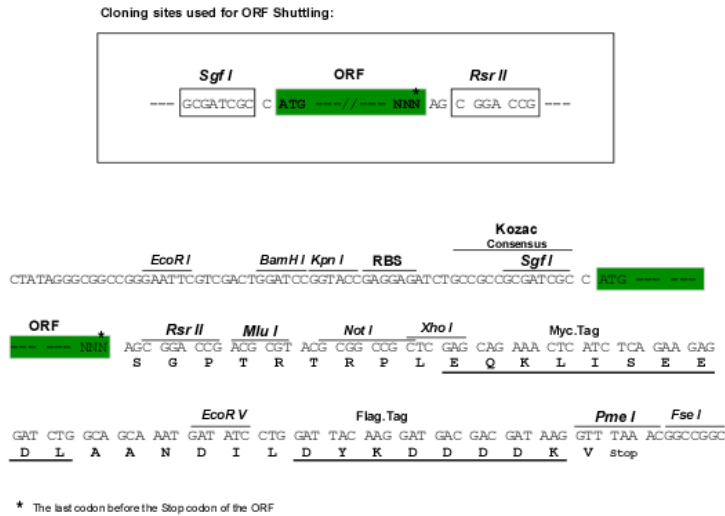
Protein Sequence:

>RC215509 representing NM_002958
 Red=Cloning site Green=Tags(s)

MRGAARLGRPGRSCLPGARGLRAPPPPLLLLLLALLPLLAPGAAAAPAPRPPELQSASAGPSVSLYLSE
 DEVRRLLIGLDAELYYVRNDLISHYALSFLLVPSETNFLHFTWHAKSKVEYKLGQVDNVLAMDMPQVNI
 SVQGEVPRTLVFRVELSCTGKVDSEVMILMQLNLTVNSSKNFTVLNFKRRKMCYKLEEVKTSALDKNT
 SRTIYDPVHAAPTSTRVFIYSVGVCVAVIFLVAIILAVLHLHSMKRIELDDSSISASSSSQGLSQPSTQT
 TQYLRADTPNNA TPITSYPTLRIEKNDLRSVTLLEAKGKVKDIAISRERITLKDVLQEGTFGRIFHGILI
 DEKDPNKEKQAFVKTVKDQASEIQVTMMLTESCKLRGLHHRNLLPITHVCIEEKGPMVILPYMNVGNLK
 LFLRQCKLVEANNPQAI SQQDLVHMAIQIACGMSYLARREVIHKDLAARNCVIDDTLQVKITDNALSRDL
 FPMDYHCLGDNENRPVRWMALESLVNNEFSSASDVWAFGVTLWELMTLGQTPYVDIDPFEMAAAYLKDGYR
 IAQPINCPDELFAVMACCCWALDPEERPKFQQLVQCLTEFHAALGAYV

SGP**TRRRLEQKLI**SEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mg2722_f09.zip
Restriction Sites: SgfI-RsrII
Cloning Scheme:



ACCN: NM_002958
ORF Size: 1821 bp

OTI Disclaimer: 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).

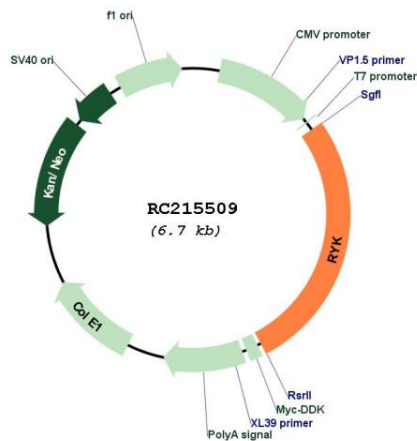
- Reconstitution Method:**
 1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_002958.4](#)
RefSeq Size: 2951 bp
RefSeq ORF: 1824 bp

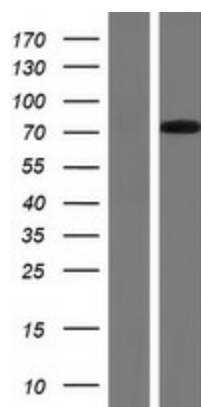
Locus ID: 6259
UniProt ID: [P34925](#)
Cytogenetics: 3q22.2
Domains: pkinase, TyrKc, S_TKc, WIF
Protein Families: Druggable Genome, Protein Kinase, Transmembrane
MW: 67.6 kDa

Gene Summary: The protein encoded by this gene is an atypical member of the family of growth factor receptor protein tyrosine kinases, differing from other members at a number of conserved residues in the activation and nucleotide binding domains. This gene product belongs to a subfamily whose members do not appear to be regulated by phosphorylation in the activation segment. It has been suggested that mediation of biological activity by recruitment of a signaling-competent auxiliary protein may occur through an as yet uncharacterized mechanism. The encoded protein has a leucine-rich extracellular domain with a WIF-type Wnt binding region, a single transmembrane domain, and an intracellular tyrosine kinase domain. This protein is involved in stimulating Wnt signaling pathways such as the regulation of axon pathfinding. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Feb 2012]

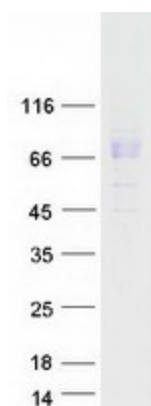
Product images:



Circular map for RC215509



Western blot validation of overexpression lysate (Cat# [LY418988]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215509 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RYK protein (Cat# [TP315509]). The protein was produced from HEK293T cells transfected with RYK cDNA clone (Cat# RC215509) using MegaTran 2.0 (Cat# [TT210002]).