

## Product datasheet for SC310220

### RYK (NM\_002958) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RYK (NM\_002958) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** RYK  
**Synonyms:** D3S3195; JTK5; JTK5A; RYK1  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_002958 edited  
GCGCGTCCCGCGGGCAGCCCCAACTCCGGACGATGCAGCGAGGAGGCGGCGGGCGGG  
GCGCTCCGGAGGTCTGAAGCCACTGCTGGCTGCCACGGGCCGGGTGCGATGAGCTGGG  
CAGCCGCCCGGCTCGGGGCTGTGAGCGGCTCGGGGCCGGGGTGGGCGCGGTGCGGC  
GGGCGGCCGACGCTCCTCTTCGGCGGCGGCGGGCGGCCATGCGTGGGCGGCGCGGCT  
GGGGCGGCGGGCCGAGTTGCCTCCCGGGGCCCGCGGCTGAGGGCCCCGCGCGCC  
GCCGCTGCTGCTTCTGCTTGGCTGTTGCCGCTGCTGCCCGGCTGGCCTGCCCGCC  
CCCCGCCCGGGCCCCCGAGCTGCAGTCGGCTTCCGCGGGGCCAGCGTGAGTCTCTA  
CCTGAGCGAGGACGAGGTGCGCCGGCTGATCGGTCTTGATGCAGAACTTTATTATGTGAG  
AAATGACCTTATTAGTCACTACGCTCTATCCTTTAGTCTGTTAGTACCCAGTGAGACAAA  
TTTCCTGCACTTACCTGGCATGCGAAGTCCAAGTTGAATATAAGCTGGGATTCCAAGT  
GGACAATGTTTTGGCAATGGATATGCCCAAGTCAACATTTCTGTTACAGGGGAAGTTCC  
ACGCACTTTATCAGTGTTTCGGGTAGAGCTTTCCTGTACTGGCAAAGTAGATTCTGAAGT  
TATGATACTAATGCAGCTCAACTTGACAGTAAATTTCTTCAAAAAATTTTACCGTCTTAAA  
TTTTAAACGAAGGAAAATGTGCTACAAAAAATTTGAAGAAGTAAAAAATTCAGCCTTGGG  
CAAAAACACTAGCAGAACTATTTATGATCCTGTACATGCAGCTCCAACCACTTCTACGG  
TGTGTTTTATATTAGTGTAGGGTTTGTGTGCAGTAATTTTCTCGTAGCAATAATATT  
AGCTGTTTTGCACCTTCATAGTATGAAAAGGATTGAACTGGATGACAGCATTAGTGCCAG  
CAGTAGTTCCCAAGGGCTGTCTCAGCCATCCACCCAGACGACTCAGTATCTGAGAGCAGA  
CAGCCCCAACAAATGCAACTCCTATCACCAGTTATCCTACCTTGCGGATAGAGAAGAACGA  
CTTGAGAAGTGTCACTCTTTTGGAGGCCAAAGGCAAGGTGAAGGATATAGCAATATCCAG  
AGAGAGGATAACTCTAAAAGATGTACTCCAAGAAGGTAATTTGGGCGTATTTTCCATGG  
GATTTTAAATAGATGAAAAAGATCCAAATAAAGAAAAACAAGCATTGTCAAAAACAGTTAA  
AGATCAAGCTTCTGAAATTCAGGTGACAATGATGCTCACTGAAAGTTGTAAGCTGCGAGG  
TCTTCATCACAGAAATCTTCTTCTATTACTCATGTGTATAGAAGAAGGAGAAAAGCC  
CATGGTGAATTTGCCTTACATGAATTTGGGGAATCTTAAATTTGTTTTACGACAGTGCAA  
GTTAGTAGAGGCCAATAATCCACAGGCAATTTCTCAGCAAGACCTGGTACACATGGCTAT



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TCAGATTGCCTGTGGAATGAGCTACCTGGCCAGAAGGGAAGTCATCCACAAAGACCTGGC  
 TGCCAGGAACTGTGTCATTGATGACACACTTCAAGTTAAGATCACAGACAATGCCCTCTC  
 CAGAGACTTGTCCCCATGGACTATCACTGTCTGGGGACAATGAAAACAGGCCAGTTTCG  
 TTGGATGGCTCTTGAAAGTCTGGTTAATAACGAGTTCTCTAGCGCTAGTGATGTGTGGGC  
 CTTTGGAGTGACGCTGTGGAACTCATGACTCTGGGCCAGACTCCCTACGTGGACATTGA  
 CCCCTTCGAGATGGCCGCATACCTGAAAGATGGTTACCGAATAGCCCAGCCAATCAACTG  
 TCCTGATGAATTTTGGCTGTGATGGCCTGTTGCTGGGCCTTAGATCCAGAGGAGAGGCC  
 CAAGTTTCAGCAGCTGGTACAGTGCCTAACAGAGTTTCATGCAGCCCTGGGGCCTACGT  
 CTGACTCCTCTCCAATCCACACCATCAGGAAGAAGGTGCCTGTGCGGGCTCACTTGAAG  
 CCTGTCAGGGATGCTTTGTATCTAACACAACGCCAACAGAAGCACATTTGTCTCCAGAA  
 CACCGTGCCTTAGAAATGCTTTAGAATCTGAACTTTTTAAGACAGACTTAATAATGTGGC  
 ATATTTCTAGATATCACTTTTATTAGTTGAACTGAAAGGGTTTTTGTAAATTTTTTGG  
 CCAAAATTTTTTAAAACATACTTACTTTGGACTAGGGTACATTCTTACAAAATAAATAA  
 ACAGTTTTTAAAATTGTTTAGACACAGATATTTGGAATTAGCTATCTTAGTGCCAACTGC  
 TTTTTATTTTTTACTTCATCAAGGTGATGTAAGTGACTCACTTTTAAAGTTTTTTTTAGT  
 GTATTTTTTATCACTACTCTGGGAAATGGTTTGTCTTCAAGATGCAATACTTTTCTTAG  
 TAAAGGAAAAACAGCATAAAAAGATACCTGGTCTGCCTGTACAAGAAAAGGCAATATTA  
 GAGGAAGAAAAATTTAAAGAAAAGCTAGAGGAAAAAAAATTTTTTAAAAATACTTATTA  
 GAAGCAAACCTGCCCTTGCATGGAAAACCTGTTATTTTTTTCAGTGAAAAGGAATTCTGCT  
 TTCGTGTTTTTGGGAAAGCAGGAACTGAGTTCATTACATCTTAAATTTGGCAGAAATTAG  
 CCTTTCTGTGAACCAGATGTGGTTTGGGGCAGATCTGTAGTAAACAATGGTGATTTTATT  
 TATTTTACTCTCTGGAAAAGGAGATAATAACAATCCAGAAAAGTAACTCATATTTCTAA  
 GGTTAAGATTCCCTTTTATTGCACCTAGAATAGTGCTATGCACAGAGCGGGTCTTGAT  
 TGTGTGCTTTTTTGTGTTTTTAAATGTAAACTGGTAAATTTTTGTGCTTATCTTCAA  
 GGCTGGCTTAAGTATAAAATTGTTTTTAAACACTTGAAAAATTAAGGATTTGTTTTAT  
 ATTAATAAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002958 unedited  
 GTTACCATTNGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCGCGTCCCC  
 GGGGCAGCCCCCAACTCCGGACGATGCAGCGAGGAGGCGGCGGCGCGCTCCGGA  
 GGTCTGAAGCCACTGCTGGCTGCCACGGGCCGGCGGTGCGATGAGCTGGGCAGCCGCC  
 CGGCTCGGGGCTGTGAGCGGCTCGGGGCCGGGGTGGGCGCGGTGCGGCGGGCGGCCGA  
 CGCTCCTCTTCGGCGGCGGCGGCGGCCATGCGTGGGGCGGCGGCTGGGGCGGCCG  
 GGCCGGAGTTGCCTCCCGGGGCGCGGCGCTGAGGGCCCGCCGCCCGCCGCTGCTG  
 CTTCTGCTTGGCTGTTGCCGCTGCTGCCCGCCTGGCGCTGCCGCCGCCCGCCCG  
 CGGCCCGGAGCTGCAGTCGGCTTCCGCGGGCCAGCGTGAGTCTCTACTGAGCGAT  
 GACGATGTGCCCGGCTGATCGGCTTGATGCANAACCTTATTATGTGAGAAATGACCTT  
 ATTAATCACTATGCTCTATCCTTTATTCTGTTAATACCCAGTGAGACAAATTTCTGAC  
 TTCAACTGGCATGCCAAATCTAAGTTGAATATAAGCTGCGGATTCCAAGTGGACAATGT  
 TTTTGGCAATGGATATGCCCCATGTCAACATTTCTTGTTCAGGCCGAATTTTTCCGCACG  
 TTTTACGTGTTCCGGTTAGAGCCTTTTCTTTCTGTGACAAGTTCAATTTTAAATTTT  
 TAAGCCTAATGGCCAGTTAACTTTTCCGTTAGATTTTTTACAAGAAATTTTTTCCCC  
 GTAACAATTTAAAACGAC

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_002958

**Insert Size:**

3100 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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_002958.2</a> , <a href="#">NP_002949.2</a>
<b>RefSeq Size:</b>	2951 bp
<b>RefSeq ORF:</b>	1824 bp
<b>Locus ID:</b>	6259
<b>UniProt ID:</b>	<a href="#">P34925</a>
<b>Cytogenetics:</b>	3q22.2
<b>Domains:</b>	pkinase, TyrKc, S_TKc, WIF
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site in the coding region, compared to variant 1, resulting in a shorter protein (isoform 2).</p>