

Product datasheet for **RG204351**

TYK2 (NM_003331) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TYK2 (NM_003331) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TYK2
Synonyms: IMD35; JTK1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG204351 representing NM_003331
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCTCTGCGCCACTGGGGATGGCCAGGGGCAGTAAGCCCGTTGGGGATGGAGCCCAGCCCATGGCTG
 CCATGGGAGGCCGAAGGTGCTTCTGCACTGGGCTGGTCCAGGCGGGGAGCCCTGGGTCACCTTCAG
 TGAGTCATCGCTGACAGCTGAGGAAGTCTGCATCCACATTGCACATAAAGTTGGTATCACTCCTCCTTG
 TCAATCTCTTTGCCCTCTCGATGCTCAGGCCAAGTCTGGTTGCCCCAAACCACATCCTAGAGATCC
 CCAGAGATGCAAGCCTGATGCTATATTTCCGCATAAGGTTTTATTCCGGAAGTGGCATGGCATGAATCC
 TCGGGAACCGGCTGTGTACCGTTGTGGGCCCCAGGAACCGAGGCATCCTCAGATCAGACAGCACAGGGG
 ATGCAACTCCTGGACCCAGCCTCATTGAGTACCTCTTTGAGCAGGGCAAGCATGAGTTTGTGAATGACG
 TGGCATCACTGTGGGAGCTGTGACCGAGGAGGAGATCCACCCTTTAAGAATGAGAGCCTGGGCATGGC
 CTTTCTGCACCTGTGACCTCGCTCTCCGCCATGGCATCCCCCTGGAGGAGGTGGCCAAGAAGACCAGC
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 AGGTGCTGGCCAGGCCGAGGGGAGCCCTGCTACATCCGGGACAGTGGGGTGGCCCTACAGACCCCTG
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 GCCAGTAGAGGAGGAGGTGAACAAGGAGGAGGTTCTAGTGGCAGCAGTGGCAGGAACCCCAAGCCAGC
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AGCCAGGCACCAGACGGCATGCAGAGCTTGC GGCTCCGAAAGTTCCCCATTGAGCAGCAGGACGGGGCCT
TCGTGCTGGAGGGCTGGGGCCGGTCTTCCCCAGCGTTCCGGAACTTGGGGCTGCCTTGACGGGCTGCTT
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GTTCTGAGACTCACTGAGTTGCTGGAACGAGGGGAGAGGCTGCCACGGCCGACAAATGTCCCTGTGAGG
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CATTCTGAAGACAGTCCATGAGAAGTACCAAGGCCAGGCCCTTCAGTGTTACGCGTGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204351 representing NM_003331
 Red=Cloning site Green=Tags(s)

MPLRHWMARGSKPVGDGAQPMAMGGLKVLHGWAGGGGEPWVTFSESSLTAEVCIIHIAHKVGITPPC
 FNLFALFDAQAQVWLPNNHILEIPRDASLMLYFRIRFYFRNWHGMNPREPAVYRCGPPGTEASSDQTAQG
 MQLLDPASFEYLFEQKHEFVNDVASLWELSTEEIHHFKNESLGMFLHLCHLALRHGIPLEEVAKKTS
 FKDCIPRSFRRHIRQHSALTRLRLRNVFRRFLRDFQPGRLSQQMVMVKYLATLERLAPRFGTERVPVCHL
 RLLAQAEGEPCYIRDSGVAPTDPGPESAAGPPTHEVLVTGTGGIQWWPVEEEVNKEEGSSGSSGRNPQAS
 LFGKKAKAHKAVGQPADRPREPLWAYFCDFRDITHVVLKEHCVSIHRQDNKCLELSLPSRAAALSFVSLV
 DGYFRLTADSSHYLCHEVAPPRLVMSIRDGIHGPLEPFVQAKLRPEDGLYLIIHWSTSHPYRLILTVAQ
 SQAPDGMQSLRLKFPVIEQQDGAFLVLEGWGRSFPVRELGAALQGCLLRAGDDCFSLRRCCLPQGETSN
 LIIMRGARASPTLNLSQLSFHRVDQKEITQLSHLGGQTRTNVYEGRLRVEGSDPEEGKMDDEDPLVPG
 RDRGQELRVVLKVLDPSSHDIALAFYETASLMSQVSHTHLAFVHGVCVRGPENIMVTEYVEHGPLDVLWR
 RERGHVPMAWKMVVAQQLASALSYLENKLVHGNVCGRNILLARLGLAEGTSPFIKLSDPGVGLGALSRE
 ERVERIPWLAPECLPGGANSLSAMDKWGFATLLEICFDGEAPLQSRSPSEKEHFYQRQHRLPEPSCPQ
 LATLTSQCLTYEPTQRPFRITLRLDLTRLQPHNLADVLTVNPDSPASDPTVFHRYLKKIRDLGEGHFGK
 VSLYCYDPTNDGTGEMVAVKALKADCGPQHRSGWKQEIDILRTLYHEHIKYKGCCEDDQGEKSLQLVMEY
 VPLGSLRDYLRHSIGLAQLLLFAQQICEGMAYLHSQHYIHRDLAARNVLLDNDRLVKIGDFGLAKAVPE
 GHEYRVREDGSDPVFWYAPECLKEYKFFYASDVWSFGVTLYELLTHCDSSQSPPTKFLLEIGIAQQGQMT
 VLRLTELLERGERLPRPDKPCPEVYHLMKNCWETEASFRPTFENLIPILKTVHEKYQGQAPS VSV

TRTRPLE - GFP Tag - V

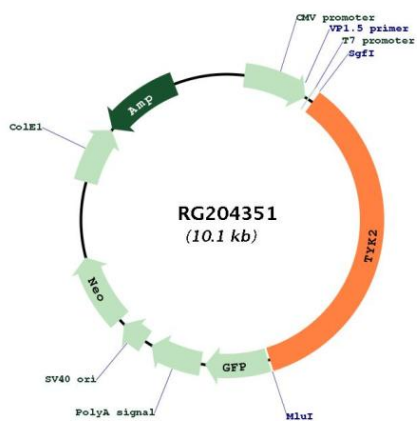
Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_003331
 ORF Size: 3561 bp

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| 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: | <ol style="list-style-type: none">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_003331.3 , NP_003322.2 |
| RefSeq Size: | 4224 bp |
| RefSeq ORF: | 3564 bp |
| Locus ID: | 7297 |
| UniProt ID: | P29597 |
| Cytogenetics: | 19p13.2 |
| Domains: | B41, pkinase, SH2, TyrKc, S_TKc |
| Protein Families: | Druggable Genome, Protein Kinase |
| Protein Pathways: | Jak-STAT signaling pathway |
| Gene Summary: | This gene encodes a member of the tyrosine kinase and, more specifically, the Janus kinases (JAKs) protein families. This protein associates with the cytoplasmic domain of type I and type II cytokine receptors and promulgate cytokine signals by phosphorylating receptor subunits. It is also a component of both the type I and type III interferon signaling pathways. As such, it may play a role in anti-viral immunity. A mutation in this gene has been associated with Immunodeficiency 35. [provided by RefSeq, Sep 2020] |

Product images:



Circular map for RG204351