

## Product datasheet for MC223847

### Tyk2 (NM\_018793) Mouse Untagged Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Tyk2 (NM\_018793) Mouse Untagged Clone  
 Tag: Tag Free  
 Symbol: Tyk2  
 Synonyms: JTK1  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 Fully Sequenced ORF: >MC223847 representing NM\_018793  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGGGACCATGCCTCTGTGTGGGCGGAGAGCCATCTTGAAGACAGCAAGGCAGATGGCACAGAAG  
 CTCAGCCCCTGGTGCCACAGGATGCTTGTGGTCTACTGCATTGGCCTGGGCTGAGGGCGGGAGCC  
 CTGGGTCACCTTCAGCCAGACATCTCTGACTGCAGAGGAGGTCTGCATCCACATCGCACACAAGTCGGC  
 ATCACTCCACCCTGCTTGAATCTCTTCGACTCTACAATGCACAGGCTAAGGTCTGGCTGCCCCAAACC  
 ATATTCTGGATACATCCCAAGACATGAACCTCTATTTTCGAATGAGGTTTTACTTCCGGAACGGCATGG  
 CATGAATCCCCAGGAGCCAGCTGTATACCGGTGTGGTTTTCCAGGGGCGAGAGACTTCTCAGACCGGGCA  
 GAGCAAGGTGTACAGCTCTTGGACTCTGCCTCGTTTTGAATACCTTTTGAGCAGGGAAAGCATGAGTTCA  
 TGAACGATGTGGTGTCTCTGCGGGACCTGTCTAGCGAGGAGGAGATCCACCACTTAAGAATGAGAGCTT  
 AGGCATGGCCTTCTGCACCTGTGTACCTTGTCTCAGCCGAGGCGTCCCTGGAGGAGATGGCCAGA  
 GAGATCAGCTTCAAGAACTGCATCCCTCATTCTTCCGACAGCACATCCGGCAGCACAATGTGCTCACAC  
 GCCTGCGGCTCCACAGAGTCTTCCGCGCTTCTGCGGGCTTCCGGCTTCCGACCTCTCCAGCAGT  
 TGTGATGGTGAAGTACTTGGCTACCCTGGAGCGGCTGGCTCCGCGCTTTGGCTCAGAGCGCATACCTGTG  
 TGTCACTGGAGGTCCTGGCACAGCCCGAGAGGGACCCCTGTACATCCAGAACAGTGGGACAGCCGCTG  
 GGGATCCAGGCCAGAGCTGCCTTCCGGGCTCCACCCACGAGGTAAGTGGTACAGGCACCGGAGGAT  
 CCAGTGGCATCCGCTGCAGACCCAGGAATCTGAGAGAGGTAACAGCAGAGGGAATCCCCACGGCAGCCGG  
 TCGGGGAAGAAGCCAAAGCCCAAGGCTGGAGAGCACCTGACAGAGGCCCTCAGGAACCACTTGA  
 CCTACTTCTGTGACTTCCAGGACATTTCCACGTGGTGTAAAGGAGCGTCGCTGCACATCCACCTCCA  
 AGACAACAAGTGTGCTGTGCCTCTGTTCCAGGCTGAGGCCCTGTCTTTGTGGCCTGGTTCGAT  
 GGCTATTTCCGCTTACTGCTGACTCCAGCCTATCTGTGCCATGAGGTGGCACCCCGAGGCTGGTGA  
 CTAGCATCCAGAACGGCATCCATGGGCCCTGATGGATCCGTTTTGTACAGCCAAGCTGTGGCCAGAGGA  
 CCGCCTTACCTGATTACGTGGAGCACCAGCCACTGCACCGCTGATCCTTACCGTGGCCCATCGAAAC  
 CCGGCTTTCAGTAATGGCCCTCGGGGCTGCGCTGCGAAAGTCCCATCACACAGCAGCCTGGAGCCT



TTGTGCTGGATGGCTGGGGCCGCTCCTTTGCCAGCTTGGGGACCTTCGGCTCGCCTTGCAGGGCTGCTC  
 GTTGCGGGCCGGTGATGACTGTTTTCCCCCTGCACCACTGCTGCCTGCCCCGGCCAAGAGAAATCTCCAAC  
 CTCGTATCATGCGGGGGTCTAGGGCCACACCCGGCCTCTCAACCTCAGTCAGCTCAGCTTCCACAGGG  
 TTCACCAGGATGAAATCACCCAGCTGTCCCACTTGGGCCAAGGCACAAGGACCAATGTGTATGAGGGCT  
 TCTAAGAGTGGGAGGCCCGATGAGGGCAAAGTGGACAATGGATGTCCCCTGAGCCTGGTGGGACTAGT  
 GGGCAGCAGCTTCGAGTGGTGTCAAAGTTCTCGACCCAGTACCATGATATCGCCTTGGCCTTCTATG  
 AGACTGCTAGCCTCATGAGCCAGGTGTACACATGCACCTGGCTTTCCTGCATGGTGTTCGCTGCGTGG  
 CTCAGAGAATATCATTGTGACAGAATTCGTAGAACATGGTCCCTTGGATGTGTGGTTACGGCGACAGAGG  
 GGCCAAGTGCCCATGACCTGGAAGATGGTCGTGGCTCAGCAGCTGGCCAGCGCCCTCAGCTACCTGGAGG  
 ACAAGAATCTGGTTCACGGGAATGTATGTGGCCGAACATCCTGCTGGCTCGCCTGGGGTTGGAGGAGGG  
 TACCAACCCCTTCATCAAGCTAAGTGTCTGGTGTGGGCCAGGGTGCCTCTCCAGGGAAGAGCGGGT  
 GAGCGCATCCCCTGGACAGCTCCCGAGTGCCTGTCTGGAGGGACCAGTAGCTTGGTACTGCCACGGACA  
 TGTGGGGCTTGGTGCCACCCCTTCTGAGATCTGCTTTGATGGGGAGGCACCCCTGCAGGGTCTGGTCC  
 CTCTGAGAAAGAACGGTTCTACACAAAGAAACATCAGCTGCCTGAACCCATCCCAGAGCTGGCCACA  
 CTCACCCGCCAGTGCCTGACCTATGAACCAGCACAGCGGCCATCCTTCCGACCATTTTGGGGACCTCA  
 CAAGGCTGCAGCCACAGAATCTAGTCGGCACTTCGGCTGTGAACCTCAGACTCACCAGCATCAGACCCAC  
 TGTTTTCCACAAGCGCTATTTGAAAAGATCCGGGATTTGGGTGAGGGTCACTTTGGCAAGGTGACCGT  
 TACTGCTACGACCCAACCAATGACGGCACTGGCGAGATGGTGGCCGTGAAGGCCCTGAAGGAAGGGTGG  
 GTCCCCAGCTCCGCTCAGGCTGGCAGCGGGAGATCGAGATCCTGCGGACGCTGTACCACGAACATATTGT  
 CAAGTATAAAGGCTGCTGTGAGGACCAAGGAGAGAAGTCTGTACAGCTGGTATGGAGTACGTCCCTCTG  
 GGCAGCCTCCGAGACTACCTGCCAAGGCACTGCGTAGGGCTGGCGCAGCTCCTGCTGTTTGGCCAGCAGA  
 TCTGCGAGGGCATGGCCTACCTGCACGCTCAGCACTACATTACCGAGACCTCGCCGCGCAACGTGCT  
 GCTGGACAACGACAGGCTGGTCAAGATTGGAGACTTTGGCTAGCCAAGGCTGTACCTGAAGGCCACGAG  
 TACTACCGAGTGCAGGACGGGACAGCCAGTGTCTGGTATGCCCCAGAATGCCTGAAGGAGTGCA  
 AATTTTACTATGCATCTGATGTCTGGTCTTCGGGTAACCTGTATGAGTTGTTGACATACTGTGACTC  
 TAACCAGAGTCCCATATGAAATTCACCGAGCTCATCGGCCATACCCAGGGCCAGATGACCGTGTGAGG  
 CTCACAGAGTGTGGAACGAGGAGAGAGGCTGCCTCGGCCTGACAGGTGTCCCTGTGAGATCTATCACC  
 TCATGAAGAACTGCTGGGAGACAGAGGCCCTCCTCCGGCCACCTTCCAGAATCTGTGCCATCTCCA  
 GACAGCACAGGAGAAGTACCAAGGTCAGGTGCCTTCCGTGTTAGCGTGTGCTGA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_018793

**Insert Size:**

3555 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).

**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\\_018793.2](#), [NP\\_061263.2](#)

**RefSeq Size:** 4822 bp

**RefSeq ORF:** 3555 bp

**Locus ID:** 54721

**UniProt ID:** [Q9R117](#)

**Cytogenetics:** 9 A3

**Gene Summary:** Involved in intracellular signal transduction by amplifying type I and type II IFN signaling. Phosphorylates the interferon-alpha/beta receptor alpha chain. Plays an essential role in promoting selective immune responses, including innate host defense mechanisms and specific antiviral activities.[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.