

## Product datasheet for **MC221487**

### Stat3 (NM\_213659) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Stat3 (NM_213659) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Stat3
Synonyms:	1110034C02Rik; A; Aprf; AW109958
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_213659, the custom clone sequence may differ by one or more nucleotides

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ATGGCTCAGTGGAAACAGCTGCAGCAGCTGGACACACGCTACCTGGAGCAGCTGCACCAGCTGTACAGCG
ACAGCTTCCCATGGAGCTGCGGCAGTTTCTGGCACCTTGGATTGAGAGTCAAGACTGGGCATATGCAGC
CAGCAAAGAGTCACATGCCACGTTGGTGTTCATAATCTCTTGGTGAAATTGACCAGCAATATAGCCGA
TTCTTGCAAGAGTCCAATGTCCTCTATCAGCACAACTTCGAAGAATCAAGCAGTTTCTGCAGAGCAGGT
ATCTTGAGAAGCCAATGGAAATTGCCCGGATCGTGGCCCGATGCCTGTGGGAAGAGTCTCGCCTCCTCCA
GACGGCAGCCACGGCAGCCAGCAAGGGGGCCAGGCAACCACCAACAGCCGCCGTAGTGACAGAGAAG
CAGCAGATGTTGGAGCAGCATCTCAGGATGTCCGGAAGCGAGTGCAGGATCTAGAACAGAAAATGAAGG
TGGTGGAGAACCTCCAGGACGACTTTGATTTCAACTACAAAACCTCAAGAGCCAAGGAGACATGCAGGA
TCTGAATGGAAACAACCAGTCTGTGACCAGACAGAAGTGCAGCAGCTGGAACAGATGCTCACAGCCCTG
GACCAGATGCGGAGAAGCATTGTGAGTGAGCTGGCGGGGCTCTTGTGAGCAATGGAGTACGTGCAGAAGA
CACTGACTGATGAAGAGCTGGCTGACTGGAAGAGGCGGCAGCAGATCGCGTGCATCGGAGGCCCTCCCAA
CATCTGCCTGGACCGTCTGGAAAACCTGGATAAATTCATTAGCAGAATCTCAACTTCAGACCCGCCAACAA
ATTAAGAAAACCTGGAGGAGCTGCAGCAGAAAAGTGTCTTACAAGGGCGACCTTATCGTGCAGCACCCGCCCA
TGCTGGAGGAGAGGATCGTGGAGCTGTTAGAAAATTAATGAAGAGTGCCTTCGTGGTGGAGCGGCAGCC
CTGCATGCCCATGCACCCGGACCCGCCCTTAGTCATCAAGACTGGTGTCCAGTTTACCACGAAAAGTCAGG
TTGCTGGTCAAATTTCTGAGTTGAATTATCAGCTTAAATTAAGTGTGCATTGATAAAGACTCTGGGG
ATGTTGCTGCCCTCAGAGGGTCTCGAAATTTAACATTCTGGGCACGAACACAAAAGTGTGAACATGGA
GGAGTCTAACAAACGGCAGCCTGTCTGCAGAGTTCAAGCACCTGACCTTAGGGAGCAGAGATGTGGGAAT
GGAGGCCGTGCCAATTGTGATGCCTCCTTGATCGTGACTGAGGAGCTGCACCTGATCACCTTCGAGACTG
AGGTGTACCACCAAGGCCTCAAGATTGACCTAGAGACCCACTCCTTGCCAGTTGTGGTGATCTCCAACAT
CTGTCAGATGCCAAATGCTTGGGCATCAATCCTGTGGTATAACATGCTGACCAATAACCCCAAGAACGTG
AACTTCTTCACTAAGCCGCAATTGGAACCTGGGACCAAGTGGCCGAGGTGCTCAGCTGGCAGTTCTCGT
CCACCACCAAGCGGGGGCTGAGCATCGAGCAGCTGACAACGCTGGCTGAGAAGCTCTAGGGCCTGGTGT
GAACTACTCAGGGTGTGAGATCACATGGGCTAAATTTGCAAAGAAAACATGGCTGGCAAGGGCTTCTCC
TTCTGGGTCTGGCTAGACAATATCATCGACCTTGTGAAAAGTATATCTTGGCCCTTGGAAATGAAGGGT
ACATCATGGGTTTCATCAGCAAGGAGCGGGAGCGGGCCATCCTAAGCACAAAGCCCCGGGCACCTTCTCT
ACTGCGCTTCAGCGAGAGCAGCAAAGAAGGAGGGGTCACTTTCACTTGGGTGGAAAAGGACATCAGTGGC
AAGACCCAGATCCAGTCTGTAGAGCCATACACCAAGCAGCAGCTGAACAACATGTCAATTTGCTGAAATCA
TCATGGGCTATAAGATCATGGATGCGACCAACATCCTGGTGTCTCCACTTGTCTACCTCTACCCCGACAT
TCCAAGGAGGAGGCATTTGAAAGTACTGTAGGCCCGAGAGCCAGGAGCACCCGAAGCCGACCCAGGT
AGTGCTGCCCCGTACCTGAAGACCAAGTTCATCTGTGTGACACCAACGACCTGCAGCAATACCATTGACC
TGCCGATGTCCCCCGCACTTTAGATTCATTGATGCAGTTTGGAAATAACGGTGAAGGTGCTGAGCCCTC
AGCAGGAGGGCAGTTTGAGTCGCTCACGTTTGACATGGATCTGACCTCGGAGTGTGCTACCTCCCCCATG
TGA
    
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**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_213659  
**Insert Size:** 2313 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](mailto: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](#)

**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:** [BC003806](#), [AAH03806](#)

**RefSeq Size:** 2964 bp

**RefSeq ORF:** 2313 bp

**Locus ID:** 20848

**UniProt ID:** [P42227](#)

**Cytogenetics:** 11 63.82 cM

**Gene Summary:**

The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.