

Product datasheet for **RG201075**

STAT1 (NM_139266) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT1 (NM_139266) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STAT1
Synonyms:	CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG201075 representing NM_139266
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTCAGTGGTACGAACCTCAGCAGCTTGACTCAAATTCCTGGAGCAGGTTACCAGCTTTATGATG
 ACAGTTTTCCCATGGAAATCAGACAGTACTGGCACAGTGGTTAGAAAAGCAAGACTGGGAGCACGCTGC
 CAATGATGTTTCATTTGCCACCATCCGTTTTTCATGACCTCCTGTACAGCTGGATGATCAATATAGTCGC
 TTTTCTTTGGAGAATAACTTCTTGCTACAGCATAACATAAGGAAAAGCAAGCGTAATCTTCAGGATAATT
 TTCAGGAAGACCAATCCAGATGTCTATGATCATTACAGCTGTCTGAAGGAAGAAAAGGAAAATTCTGGA
 AAACGCCCAGAGATTTAATCAGGCTCAGTCGGGAATATTCAGAGCACAGTGATTTAGACAAAACAGAAA
 GAGCTTGACAGTAAAGTCAGAAATGTGAAGGACAAGGTTATGTGTATAGAGCATGAAATCAAGAGCCTGG
 AAGATTTACAAGATGAATATGACTTCAAATGCAAAACCTTGACAGAACAGAGAACACGAGACCAATGGTGT
 GGCAAAGAGTGATCAGAAACAAGAACAGCTGTTACTCAAGAAGATGTATTTAATGCTTGACAATAAGAGA
 AAGGAAGTAGTTCACAAAATAATAGAGTTGCTGAATGTCACTGAACTTACCCAGAATGCCCTGATTAATG
 ATGAACTAGTGGAGTGGAGCGGAGACAGCAGAGCGCCTGTATTGGGGGGCCGCCAATGCTTGCTTGGA
 TCAGCTGCAGAACTGGTTCATAAGTTGCGGAGAGTCTGCAGCAAGTTCGGCAGCAGCTTAAAAAGTTG
 GAGGAATTGGAACAGAAAACACCTACGAACATGACCCTATCACAAAAACAAACAAGTGTATGGGACC
 GCACCTTCAGTCTTTCCAGCAGCTCATTACAGAGCTCGTTTGGTGGAAAGACAGCCCTGCATGCCAAC
 GCACCTCAGAGGCCGCTGGTCTTGAAGACAGGGTCCAGTTCAGTGTGAAGTTGAGACTGTTGGTGA
 TTGCAAGAGCTGAATTATAATTTGAAAGTCAAAGTCTTATTTGATAAAGATGTGAATGAGAGAAAACAG
 TAAAAGGATTTAGGAAGTTCAACATTTTGGGCACGCACACAAAAGTGATGAACATGGAGGATCCACCAA
 TGGCAGTCTGGCGCTGAATTTCCGACCTGCAATTTGAAAGAACAGAAAATGCTGGCACCAGAACGAAT
 GAGGGTCTCTCATCGTTACTGAAGAGCTTCACTCCCTTGTGTTTAAACCAATTTGGCCAGCCTGGTT
 TGGTAATTGACCTCGAGACGACCTCTCTGCCGTTGTGGTGTCTCCAACGTGAGCCAGCTCCCAGCGG
 TTGGGCTCCATCCTTTGGTACAACATGCTGGTGGCGGAACCCAGGAATCTGTCTTCTTCTGACTCCA
 CCATGTGCACGATGGGCTCAGCTTTCAGAAAGTGTGAGTTGGCAGTTTTCTTCTGTCCACAAAAGAGGTC
 TCAATGTGGACCAGCTGAACATGTTGGGAGAGAAGCTTCTTGGTCTAACGCCAGCCCCGATGGTCTCAT
 TCCGTGGACGAGGTTTTGTAAGGAAAATAAAATGATAAAAAATTTCCCTTCTGGCTTTGGATTGAAAGC
 ATCCTAGAACTCATTAAAAACACCTGCTCCCTCTCTGGAATGATGGGTGCATCATGGGCTTCATCAGCA
 AGGAGCGAGAGCGTGCCCTGTTGAAAGACAGCAGCCGGGGACCTTCTGCTGCGGTTCAAGTGAAGCTC
 CCGGGAAGGGGCCATCACATTCACATGGGTGGAGCGGTCCAGAACGGAGGCGAACCTGACTTCCATGCG
 GTTGAACCTACACGAAGAAAGAACTTTCTGCTGTACTTTCCCTGACATCATTGCAATTACAAAGTCA
 TGGCTGCTGAGAAATTCCTGAGAAATCCCTGAAGTATCTGTATCCAAATATTGACAAAGACCATGCCTT
 TGGAAAGTATTACTCCAGGCCAAAGGAAGCACCAGAGCCAATGGAACCTTGATGGCCCTAAAGGAAGTGA
 TATATCAAGACTGAGTTGATTTCTGTGTCTGAAGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - **GTTTAA**

Protein Sequence: >RG201075 representing NM_139266
Red=Cloning site Green=Tags(s)

MSQWYELQQLDSKFLEQVHQLYDDSPMEIRQYLAQWLEKQDWEHAANDVSFATIRFHDLLSQLDDQYSR
 FSLENNFLLQHNIRKSKRNLDNFQEDPIQMSMIYISCLKEERKILENAQRFNQAQSGNIQSTVMLDKQK
 ELDSKVRNVKDKVMCIEHEIKSLEDLQDEYDFKCKTLQNRHETNGVAKSDQKQEQLLLKKMYLMLDNKR
 KEVVHKIIELLNVTELTONALINDELVEWKRRQQSACIGGPPNACLDQLQNWFTIVAESLQQVRRQLKKL
 EELEQKYTYEHDPITKNKQVLWDRTFSLFQQLIQSSFVVERQPCMPHPQRPLVLKTGVQFTVKLRLLVK
 LQELNYNLKVKVLFDKDVNERNTVKGFRKFNILGTHTKVMNMEESTNGSLAAEFRHLQLKEQKNAGTRTN
 EGPLIVTEELHLSFETQLCQPLVIDLETTSLPVVVISNVSQPSGWASILWYNMLVAEPRNLSFFLTP
 PCARWAQLSEVLSWQFSSVTKRGLNVDQLNMLGEKLLGPNASPDGLIPWTRFCKENINDKNFPFWLWIES
 ILELIKHLPLWNDGCMGFISKERERALLKDQQPGTFLLRFSESSREGAITFTWVERSQNGGEPDFHA
 VEPYTKKELSAVTFPDIIRNYKVMAAENIPENPLKYL YPNIDKDHFAGKYYSRPKEAPEMELDGPKGTG
 YIKTELISVSEV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_139266

ORF Size: 2136 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 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](#)

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_139266.2](#)

RefSeq Size: 2762 bp

RefSeq ORF: 2139 bp

Locus ID: 6772

UniProt ID: [P42224](#)

Cytogenetics: 2q32.2

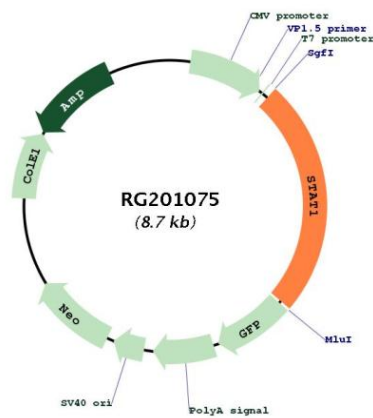
Domains: SH2, STAT

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Chemokine signaling pathway, Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer, Toll-like receptor signaling pathway

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. The protein encoded by this gene can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. The protein plays an important role in immune responses to viral, fungal and mycobacterial pathogens. Mutations in this gene are associated with Immunodeficiency 31B, 31A, and 31C. [provided by RefSeq, Jun 2020]

Product images:


Circular map for RG201075