

Product datasheet for **RG205753**

STAT5A (NM_003152) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT5A (NM_003152) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STAT5A
Synonyms:	MGF; STAT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205753 representing NM_003152
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGCTGGATCCAGGCCAGCAGCTGCAGGGAGACGCGCTGCGCCAGATGCAGGTGCTGTACGGCC
 AGCACTTCCCATCGAGGTCCGGCACTACTTGGCCAGTGGATTGAGAGCCAGCCATGGGATGCCATTGA
 CTTGGACAATCCCAGGACAGAGCCCAAGCCACCCAGCTCCTGGAGGGCCTGGTGCAGGAGCTGCAGAAG
 AAGGCGGAGCACCAGGTGGGGGAAGATGGGTTTTACTGAAGATCAAGCTGGGGCACTACGCCACGCAGC
 TCCAGAAAACATATGACCCTGCCCCCTGGAGCTGGTCCGCTGCATCCGGCACATTCTGTACAATGAACA
 GAGGCTGGTCCGAGAAGCAACAATTGCAGCTCTCCGGCTGGGATCCTGGTTGACGCCATGTCCAGAAG
 CACCTTCAGATCAACCAGACATTTGAGGAGCTGCGACTGGTCACGCAGGACACAGAGAATGAGCTGAAGA
 AACTGCAGCAGACTCAGGAGTACTTCATCATCCAGTACCAGGAGAGCCTGAGGATCCAAGCTCAGTTTGC
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 CTGGAGGCTGGTTGCAGCGTGAGGCACAGACACTGCAGCAGTACCGCTGGAGCTGGCCGAGAAGCACC
 AGAAGACCCTGCAGCTGCTGCGGAAGCAGCAGACCATCATCTGGATGACGAGCTGATCCAGTGGAGCG
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 GGTGACCAGCACATTTCATTGAGAAGCAGCCTCCTCAGGTCTGAAGACCCAGACCAAGTTTGCAGCC
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 TCAGTAGCAGCAGGCCAAGTCTCTGCTTAAAAATGAGAACACCCGCAACGAGTGCAGTGGTGGATCCT
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 GGTCTTCTCAAGTACTACACTCTGTGCTGGCTAAAGCTGTTGATGGATATGTGAAACACAGATCAAG
 CAAGTGGTCCCTGAGTTTGTGAATGCATCTGCAGATGCTGGGGCAGCAGCGCCACGTACATGGACCAGG
 CCCCTCCCAGCTGTGTGCCCCAGGCTCCCTATAACATGTACCCACAGAACCCTGACCATGTACTCGA
 TCAGGATGGAGAATTCGACCTGGATGAGACCATGGATGTGGCCAGGCACGTGGAGGAACTTTACGCCGA
 CCAATGGACAGTCTTGACTCCCGCTCTCGCCCCCTGCCGGTCTTTTACCTCTGCCAGAGGCTCCCTCT
 CA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

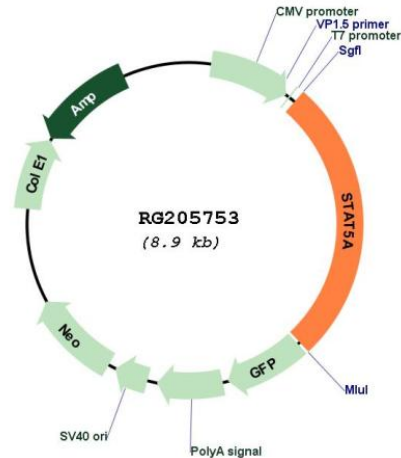
Protein Sequence: >RG205753 representing NM_003152
 Red=Cloning site Green=Tags(s)

MAGWIIQAQQLQGDALRQMQLVYGQHFPIEVRHYLAQWIESQPWDAIDLDPQDRAQATQLLEGLVQELQK
 KAEHQVGEDGFLLKIKLGHYATQLQKTYDRCPLELVRCIRHILYNEQRLVREANNCSSPAGILVDAMSQK
 HLQINQTFEELRLVTQDTENELKKLQQTQEYFIIQYQESLRIQAQFAQLAQLSPQERLSRETALQQKQVS
 LEAWLQREAAQTLQYRVELAEKHQKTLQLLRKQQTIIIDDELIQWKRRQQLAGNGGPPPEGSLDVLQSWCE
 KLAEEIIWQNRQQIRRAEHLCCQLPIPGPVEEMLAEVNATITDIIISALVTSTFIIIEKQPPQVLKTQTKFAA
 TVRLLVGGKLVNVMNPPQVKATIISEQQAKSLLKNENTRNECSGEILNCCVMEYHQATGTLSAHFRNMS
 LKRIKRADRRGAESVTEEFVLFESQFSVGSNELVFQVKLSLPVVVIVHGSQDHNATATVLWDNAFAE
 PGRVPPFAVPDKVLWPQLCEALNMKFAEVQSNRGLTKENLVFLAQKLFNNSSSHLEDYSGLSVSWSQFNR
 ENLPGWNYTFWQWFDGVMVLLKHHKPHWNDGAILGFVNKQQAHDLLINKPDGTFLLRFSDSEIGGITIA
 WKFDSPERNLWNLKPFTRDFSIIRSLADRLGDSLIIYVFPDRPKDEVFSKYYTPVLAKAVDGYVKPQIK
 QVVPEFVNASADAGGSSATYMDQAPSPAVCPQAPYNMYPQNPDPVLDQDGEFDLDETMVARHVEELLRR
 PMDSLDSRLSPPAGLFTSARGSL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Plasmid Map:



ACCN: NM_003152

ORF Size: 2382 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_003152.2](#), [NP_003143.2](#)

RefSeq Size:	4298 bp
RefSeq ORF:	2385 bp
Locus ID:	6776
UniProt ID:	P42229
Cytogenetics:	17q21.2
Domains:	SH2, STAT
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors
Protein Pathways:	Acute myeloid leukemia, Chronic myeloid leukemia, ErbB signaling pathway, Jak-STAT signaling pathway, Pathways in cancer
Gene Summary:	<p>The protein encoded by this gene is a member of the STAT family of transcription factors. 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 by, and mediates the responses of many cell ligands, such as IL2, IL3, IL7 GM-CSF, erythropoietin, thrombopoietin, and different growth hormones. Activation of this protein in myeloma and lymphoma associated with a TEL/JAK2 gene fusion is independent of cell stimulus and has been shown to be essential for tumorigenesis. The mouse counterpart of this gene is found to induce the expression of BCL2L1/BCL-X(L), which suggests the antiapoptotic function of this gene in cells. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2013]</p>