

Product datasheet for **RC239581**

STAT5A (NM_001288718) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT5A (NM_001288718) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAT5A
Synonyms:	MGF; STAT5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC239581 representing NM_001288718
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGCTGGATCCAGGCCAGCAGCTGCAGGGAGACGCGCTGCGCCAGATGCAGGTGCTGTACGGCC
 AGCACTTCCCATCGAGGTCCGGCACTACTTGGCCAGTGGATTGAGAGCCAGCCATGGGATGCCATTGA
 CTTGGACAATCCCAGGACAGAGCCCAAGCCACCCAGCTCCTGGAGGGCCTGGTGCAGGAGCTGCAGAAG
 AAGGCGGAGCACCAGGTGGGGGAAGATGGGTTTTACTGAAGATCAAGCTGGGGCACTACGCCACGCAGC
 TCCAGAAAACATATGACCGCTGCCCCCTGGAGCTGGTCCGCTGCATCCGGCACATTCTGTACAATGAACA
 GAGGCTGGTCCGAGAAGCCAACAATTGCAGCTCTCCGGCTGGGATCCTGGTTGACGCCATGTCCAGAAG
 CACCTTCAGATCAACCAGACATTTGAGGAGCTGCGACTGGTCACGCAGGACACAGAGAATGAGCTGAAGA
 AACTGCAGCAGACTCAGGAGTACTTCATCATCCAGTACCAGGAGAGCCTGAGGATCCAAGCTCAGTTTGC
 CCAGCTGGCCAGCTGAGCCCCAGGAGCGTCTGAGCCGGGAGACGGCCCTCCAGCAGAAGCAGGTGTCT
 CTGGAGGCTGGTTGCAGCGTGAGGCACAGACACTGCAGCAGTACCGCGTGGAGCTGGCCGAGAAGCACC
 AGAAGACCCTGCAGCTGCTGCGGAAGCAGCAGACCATCATCTGGATGACGAGCTGATCCAGTGGGAAGCG
 GCGGCAGCAGCTGGCCGGGAACGGCGGGCCCCCGAGGGCAGCCTGGACGTGCTACAGTCCCTGGTGTGAG
 AAGTTGGCCGAGATCATCTGGCAGAACCGGCAGCAGATCCGCAGGGCTGAGCACCTCTGCCAGCAGCTGC
 CCATCCCCGGCCAGTGGAGGAGATGCTGGCCGAGGTCAACGCCACCATCACGGACATTATCTCAGCCCT
 GGTGACCAGCACATTATCATTGAGAAGCAGCCTCCTCAGGTCTGAAGACCCAGACCAAGTTTGCAGCC
 ACCGTACGCCCTGCTGGTGGCGGGGAAGCTGAACGTGCACATGAATCCCCCAGGTGAAGGCCACCATCA
 TCAGTGAGCAGCAGGCCAAGTCTCTGCTTAAAAATGAGAACACCCGCAACGAGTGCAGTGGTGAATCCT
 GAACAACCTGCTGCGTGATGGAGTACCACCAAGCCACGGGCACCCTCAGTGCACCCTTCAGGAACATGTCA
 CTGAAGAGGATCAAGCGTCTGACCGCGGGGTGCAGAGTCCGTGACAGAGGAGAAGTTCACAGTCTGT
 TTGAGTCTCAGTTCAGTGTGGCAGCAATGAGCTTGTGTTCCAGGTGAAGACTCTGTCCCTACCTGTGGT
 TGTTCATCGTCCACGGCAGCCAGGACCACAATGCCACGGCTACTGTGCTGTGGGACAATGCCTTTGCTGAG
 CCGGGCAGGGTGCCATTTGCCGTGCCTGACAAAGTGTGTGGCCGAGCTGTGTGAGGGCTCAACATGA
 AATTCAAGGCCGAAGTGCAGAGCAACCGGGCCTGACCAAGGAGAACCTCGTGTCTGGCGCAGAAACT
 GTTCAACAACAGCAGCAGCCACCTGGAGGACTACAGTGGCCTGTCCGTGCTGGTCCCAGTTCAACAGG
 GAGAACTTGCCGGCTGGAACCTACACTTCTGGCAGTGGTTTACGGGGTGTGAGGTTGAAGAAGC
 ACCACAAGCCCCACTGGAATGATGGGGCCATCCTAGGTTTTGTGAATAAGCAACAGGCCACGACCTGCT
 CATCAACAAGCCCGACGGGACCTTCTTGTGCGCTTTAGTGACTCAGAAATCGGGGGCATACCATCGCC
 TGGAAGTTTACTCCCCGGAACGCAACCTGTGGAACCTGAAACCATTACCACGCGGGATTTCTCCATCA
 GGTCCCTGGCTGACCGGCTGGGGACCTGAGCTATCTCATCTATGTGTTTCTGACCGCCCCAAGGATGA
 GGTCTTCTCAAGTACTACACTCTGTGCTGGCTAAAGCTGTTGATGGATATGTGAAACACAGATCAAG
 CAAGTGGTCCCTGAGTTTGTGAATGCATCTGCAGATGCTGGGGCAGCAGCGCCACGTACATGGACCAGG
 CCCCTCCCAGCTGTGTGCCCCAGGCTCCCTATAACATGTACCCACAGAACCCTGACCATGTACTCGA
 TCAGGATGGAGAATTCGACCTGGATGAGACCATGGATGTGGCCAGGCACGTGGAGGAACTTTACGCCGA
 CCAATGGACAGTCTTGACTCCCGCTCTCGCCCCCTGCCGGTCTTTTACCTCTGCCAGAGGCTCCCTCT
 CA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239581 representing NM_001288718
 Red=Cloning site Green=Tags(s)

MAGWIIQAQQLQGDALRQMQLVYGQHFPIEVRHYLAQWIESQPWDAIDLDPQDRAQATQLLEGLVQELQK
 KAEHQVGEDGFLKIKLGHYATQLQKTYDRCPLELVRCIRHILYNEQRLVREANNCSSPAGILVDAMSQK
 HLQINQTFEELRLVTQDTENELKKLQQTQEYFIIQYQESLRIQAQFAQLAQLSPQERLSRETALQQKQVS
 LEAWLQREAAQTLQYRVELAEKHQKTLQLLRKQQTIIIDDELIQWKRRQQLAGNGGPPPEGSLDVLQSWCE
 KLAEEIIWQNRQQIRRAEHLCCQLPIPGPVEEMLAEVNATITDIIISALVTSTFIIIEKQPPQVLKTQTKFAA
 TVRLLVGGKLVNVMNPPQVKATIIISQQAKSLLKNENTRNECSGEILNCCVMEYHQATGTLSAHFRNMS
 LKRIKRADRRGAESVTEEKFTVLFESQFSVGSNELVFQVKTLVSLPVVVIHVHGSQDHNATATVLDWNAFAE
 PGRVPFAVPDKVLWPQLCEALNMKFAEVQSNRGLTKENLVFLAQKLFNNSSSHLEDYSGLSVSWSQFNR
 ENLPGWNYTFWQWFDGVMVLLKHHKPHWNDGAILGFVNKQQAHDLLINKPDGTFLLRFSDSEIGGITIA
 WKFDSPERNLWNLKPFTRDFSIIRSLADRLGDSLIIYVFPDRPKDEVFSKYYTPVLAKAVDGYVKPQIK
 QVVPEFVNASADAGGSSATYMDQAPSPAVCPQAPYNMYPQNPDHVLDQDGEFDLDETMVARHVEELLRR
 PMDSLDSRLSPPAGLFTSARGSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



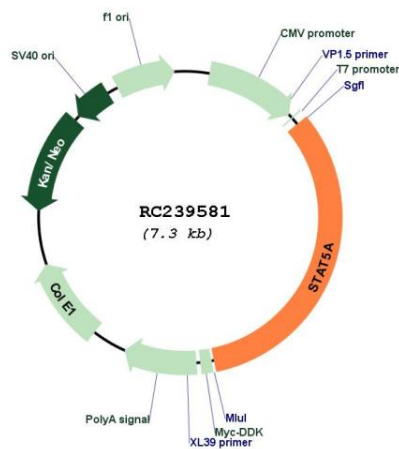
* The last codon before the Stop codon of the ORF

ACCN: NM_001288718
 ORF Size: 2382 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	<u>NM_001288718.1</u> , <u>NP_001275647.1</u>
RefSeq Size:	4414 bp
RefSeq ORF:	2385 bp
Locus ID:	6776
UniProt ID:	<u>P42229</u>
Cytogenetics:	17q21.2
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
MW:	91.1 kDa

Gene Summary:

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]

Product images:


Circular map for RC239581