

## Product datasheet for **RC239514**

### **STAT5A (NM\_001288719) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	STAT5A (NM_001288719) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAT5A
Synonyms:	MGF; STAT5
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC239514 representing NM\_001288719  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGGCTGGATCCAGGCCAGCAGCTGCAGGGAGACGCGCTGCGCCAGATGCAGGTGCTGTACGGCC  
 AGCACTTCCCATCGAGGTCCGGCACTACTTGGCCAGTGGATTGAGAGCCAGCCATGGGATGCCATTGA  
 CTTGGACAATCCCAGGACAGAGCCCAAGCCACCCAGCTCCTGGAGGGCCTGGTGCAGGAGCTGCAGAAG  
 AAGGCGGAGCACCAGGTGGGGGAAGATGGGTTTTTACTGAAGATCAAGCTGGGGCACTACGCCACGCAGC  
 TCCAGTGCAGCTCCTCGGCTGGGATCCTGGTTGACGCCATGTCCCAGAAGCACCTTCAGATCAACCAGAC  
 ATTTGAGGAGCTGCGACTGGTACGCAGGACACAGAGAATGAGCTGAAGAACTGCAGCAGACTCAGGAG  
 TACTTCATCATCCAGTACCAGGAGAGCCTGAGGATCCAAGCTCAGTTTGGCCAGCTGGCCAGCTGAGCC  
 CCCAGGAGCGTCTGAGCCGGGAGACGGCCCTCCAGCAGAAGCAGGTGTCTCTGGAGGCTGGTTGCAGCG  
 TGAGGCACAGACTGCAGCAGTACCGCTGGAGCTGGCCGAGAAGCACCAGAAGACCCTGCAGCTGCTG  
 CGGAAGCAGCAGACCATCATCCTGGATGACGAGCTGATCCAGTGGAAAGCGCGGCCAGCAGCTGGCCGGGA  
 ACGGCGGGCCCCCGAGGGCAGCCTGGACGTGCTACAGTCTGGTGTGAGAAGTTGGCCGAGATCATCTG  
 GCAGAACCGGCAGCAGATCCGCAGGGCTGAGCACCTCTGCCAGCAGCTGCCCATCCCCGGCCAGTGGAG  
 GAGATGCTGGCCGAGGTCAACGCCACCATCACGGACATTATCTCAGCCCTGGTGACCAGCACATTCATCA  
 TTGAGAAGCAGCCTCCTCAGGTCTGAAGACCCAGACCAAGTTTGCAGCCACCGTACGCCTGCTGGTGGG  
 CGGGAAGCTGAACGTGCACATGAATCCCCCAGGTGAAGGCCACCATCATCAGTGAGCAGCAGGCCAAG  
 TCTCTGCTTAAAAATGAGAACACCCGCAACGAGTGCAGTGGTGAATCCTGAACAACCTGCAGTGCATG  
 AGTACCACAAGCCACGGGCACCTCAGTGCACCTTCAGGAACATGCTCACTGAAGAGGATCAAGCGTGC  
 TGACCGCGGGGTGCAGAGTCCGTGACAGAGGAGAAGTTCACAGTCTGTTTGAAGTCTCAGTTCAGTGT  
 GGCAGCAATGAGCTTGTGTTCCAGGTGAAGACTCTGTCCCTACCTGTGGTTGTCATCGTCCACGGCAGCC  
 AGGACCACAATGCCACGGCTACTGTGCTGTGGACAATGCCTTTGCTGAGCCGGGCGAGGGTGCCATTTGC  
 CGTGCCTGACAAAGTGTGTGGCCGAGCTGTGTGAGGCGCTCAACATGAAATCAAGGCCGAAGTGCAG  
 AGCAACCAGGGCCTGACCAAGGAGAACCCTCGTGTCTGGCGCAGAACTGTTCAACAACAGCAGCAGCC  
 ACCTGGAGGACTACAGTGGCCTGTCCGTGCTGGTCCCAGTTCAACAGGGAGAACTTGCCGGGCTGGAA  
 CTACACCTTCTGGCAGTGGTTTACGGGGTGTGAGGTTGTTGAAGAAGCACCACAAGCCCCACTGGAAT  
 GATGGGGCCATCCTAGGTTTTGTGAATAAGCAACAGGCCACGACCTGCTCATCAACAAGCCCGACGGGA  
 CCTTCTTGTGCGCTTTAGTGACTCAGAAATCGGGGGCATCACCATCGCCTGGAAGTTTGAAGTCCCGGA  
 ACGCAACCTGTGGAACCTGAAACCATTACCACGCGGGATTTCTCCATCAGGTCCCTGGTGACCGGCTG  
 GGGGACCTGAGCTATCTCATCTATGTGTTTCTGACCGCCCAAGGATGAGGTCTTCTCCAAGTACTACA  
 CTCCTGTGCTGGCTAAAGCTGTTGATGGATATGTGAAACCACAGATCAAGCAAGTGGTCCCTGAGTTTGT  
 GAATGCATCTGCAGATGCTGGGGCAGCAGCGCCACGTACATGGACCAGGCCCTCCAGCTGTGTGC  
 CCCCAGGCTCCCTATAACATGTACCCACAGAACCCTGACCATGTACTCGATCAGGATGGAGAATTCGACC  
 TGGATGAGACCATGGATGTGGCCAGGCAGTGGAGGAACCTTACGCCGACCAATGGACAGTCTTGACTC  
 CGCCTCTGCCCCCTGCCGGTCTTTTACCTCTGCCAGAGGCTCCCTCTCA

**ACGCGT**ACGCGGGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC239514 representing NM\_001288719  
 Red=Cloning site Green=Tags(s)

MAGWIIQAQQLQGDALRQMQLVYGQHFPIEVRHYLAQWIESQPWDAIDLDPQDRAQATQLLEGLVQELQK  
 KAEHQVGEDGFLKIKLGHYATQLQCSSPAGILVDAMSQKHLQINQTFEELRLVTQDTENELKKLQQTQE  
 YFIIQYQESLRIQAQFAQLAQLSPQERLSRETALQQKQVSLEAWLQREAQTLQQYRVELAEKHQKTLQLL  
 RKQQTIIILDDELIQWKRQQLAGNGGPPPEGLDVLQSWCEKLAELIWNQNRQQIRRAEHLCCQLPIPGPVE  
 EMLAEVNATITDIIISALVTSTFIIIEKPPQVLKTQTKFAATVRLLVGGKLVNVMNPPQVKATIIISEQQAK  
 SLLKNENTRNECSGELNCCVMEYHQATGTLSAHFRNMSLKRIKRRDRGAESVTEEKFTVLFESQFSV  
 GSNELVFQVKTLSLPPVVIVHGSQDHNATATVLWNAFAEPGRVPFAVPDKVLPQCEALNMKFKAEVQ  
 SNRGLTKENLVFLAQKLFNNSSSHLEDYSGLSVSWSQFNRENLPGWNYTFWQWFDGVMVLLKHHKPHWN  
 DGAILGFVNKQQAHDLLINKPDGTFLLRFSDSEIGGITIAWKFDSPERNLWNLKPFTRDFSIIRSLADRL  
 GDL SYL IYVFPDRPKDEVFSKYYPVLAKAVDGYVKPQIKQVPEFVNASADAGGSSATYMDQAPSPAVC  
 PQAPYNMYPQNPDHVLDQDGEFDLDETMVARHVEELLRRPMSLDSRLSPPAGLFTSARGSL S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

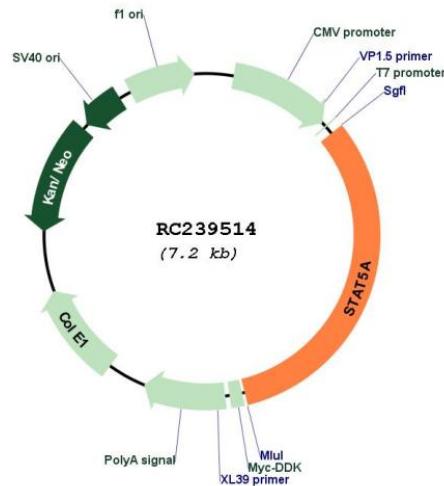
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001288719

**ORF Size:** 2292 bp

**OTI Disclaimer:** 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\\_001288719.1](#), [NP\\_001275648.1](#)

**RefSeq Size:** 4135 bp

**RefSeq ORF:** 2295 bp

**Locus ID:** 6776

<b>UniProt ID:</b>	<u>P42229</u>
<b>Cytogenetics:</b>	17q21.2
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors
<b>Protein Pathways:</b>	Acute myeloid leukemia, Chronic myeloid leukemia, ErbB signaling pathway, Jak-STAT signaling pathway, Pathways in cancer
<b>MW:</b>	87.4 kDa
<b>Gene Summary:</b>	<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>