

## Product datasheet for **RC230469**

### STAT6 (NM\_001178080) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	STAT6 (NM_001178080) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAT6
Synonyms:	D12S1644; IL-4-STAT; STAT6B; STAT6C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC230469 representing NM\_001178080  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCTCTGTGGGTCTGGTCTCCAAGATGCCCCAGAAAAAGTGCAGCGGCTCTATGTCGACTTTCCCC  
AACACCTGCGGCATCTTCTGGGTGACTGGCTGGAGAGCCAGCCCTGGGAGTTCCTGGTGGCTCCGACGC  
CTTCTGTGCAACTTGGCTAGTGCCTACTTTCAGACACTGTCCAGCACCTTCAGGCCTCGGTGGGAGAG  
CAGGGGGAGGGGAGCACCATCTTGCAACACATCAGCACCTTGAGAGCATATATCAGAGGGACCCCTGA  
AGCTGGTGGCCACTTTCAGACAAATACTTCAAGGAGAGAAAAAGCTGTTATGGAACAGTTCGCCACTT  
GCCAATGCCTTTCAGTGAAGCAGGAAGAAGTCAAGTTAAGACAGGCTTGGGAGGCTGCAGCACCGA  
GTAGGGGAGATCCACCTTCTCCGAGAAGCCCTGCAGAAGGGGGCTGAGGCTGGCCAAGTGTCTCTGCACA  
GCTTGATAGAAACTCTGCTAATGGGACTGGGCAAGTGAAGCCCTGGCCATGCTACTGCAGGAGACCAC  
TGGAGAGCTAGAGGCAGCAAAGCCCTAGTGTGAAGAGGATCCAGATTTGAAAACGGCAGCAGCAGCTG  
GCAGGGAATGGCCACCCGTTTGGAGAGAGCCTGGCCCCACTCCAGGAGAGGTGTAAAGCCCTGGTGGACA  
TTTATTCCAGCTACAGCAGGAGGTAGGGGCGGCTGGTGGGGAGCTTGAGCCCAAGACCCGGGCATCGCT  
GACTGGCCGGCTGGATGAAGTCTGAGAACCCTCGTACCAGTTGCTTCTGTTGGGCTTGGGTTCTGGGGG  
CAGGACTGAAGACTCAGACCAAGTTCAGGCTGGAGTTCGATTCCTGTTGGGCTTGGGTTCTGGGGG  
CCCCAGCAAGCCTCCGCTGGTCAAGGCCGACATGGTGACAGAGAAGCAGGCGCGGGAGCTGAGTGTGCC  
TCAGGGTCTGGGGCTGGAGCAGAAAGCACTGGAGAAATCATCAACAACACTGTGCCCTTGGAGAACAGC  
ATTCTGGGAAGTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
CAAACCTCCCATCCAGCTCCAGGCCTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
AATGCCAAAGCCACTATCCTGTGGGACAATGCCTTCTCTGAGATGGACCGCTGCCTTTTGGTGGCTG  
AGCGGGTGCCTGGGAGAAGATGTGTAAACTCTGAACCTGAAGTTCATGGCTGAGGTGGGACCAACCG  
GGGGTGTCTCCAGAGCACTTCTTCTTCTGGCCAGAAGATCTTCAATGACAACAGCCTCAGTATGGAG  
GCCTTCCAGCACCGTCTGTGCTGCTGGTGCAGTTCAACAAGGAGATCCTGCTGGGCCGTTGGCTTCACT  
TTTGGCAGTGGTTTGTGGTGTCTGGACCTCACCAAAGCTGTCTCCGGAGCTACTGGTCTGACCCGGT  
GATCATTGGCTTTCATCAGCAAACAGTACGTTACTAGCCTTCTTCTCAATGAGCCGACGGAACCTTCTC  
CTCCGCTTCCAGGACTCAGAGATTGGGGGCATCACCATTGCCATGTCATCCGGGGCCAGGATGGCTCTC  
CACAGATAGAGAACATCCAGCCATTCTGTGCCAAAGACCTGTCCATTCCGCTCACTGGGGGACCGAATCCG  
GGATCTTGCTCAGCTCAAAAATCTCTATCCCAAGAAGCCCAAGGATGAGGCTTTCGGGAGCCACTACAAG  
CCTGAACAGATGGGAAGGATGGCAGGGTTATGTCCCAGCTACCATCAAGATGACCGTGGAAAAGGGACC  
AACCATTCTACCCAGAGCTCCAGATGCCTACCATGGTGCCTTCTTATGACCTTGGAAATGGCCCTGA  
TTCCTCCATGAGCATGCAGCTTGGCCAGATATGGTGGCCAGGTGTACCCACCACACTCTCACTCCATC  
CCCCGTATCAAGGCCTCTCCCAGAAGAATCAGTCAACGTGTTGTCAGCCTTCCAGGAGCCTCACCTGC  
AGATCCCCCAGCCTGGGCCAGATGAGCCTGCCCTTTGACCAGCCTCACCCCAGGGCCTGCTGCCGTG  
CCAGCCTCAGGAGCATGCTGTGTCCAGCCCTGACCCCTGCTCTGCTCAGATGTGACCATGGTGGAAAGAC  
AGCTGCCTGAGCCAGCCAGTGCAGCGTTTCTCAGGGCACTGGATTGGTGAAGACATATTCCTCCTC  
TGCTGCCTCCACTGAACAGGACCTCACTAAGCTTCTCCTGGAGGGGCAAGGGGAGTCGGGGGAGGGT  
CTTGGGGCACAGCCCTCCTGCAGCCCTCCACTATGGGCAATCTGGGATCTCAATGTCCACATGGAC  
CTAAGGGCAACCCAGTTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC230469 representing NM\_001178080  
 Red=Cloning site Green=Tags(s)

MSLWGLVSKMPPEKVQRLVYDFPQHLRHLLGDWLESQPWEFLVGSDAFCCNLASALLSDTVQHLQASVGE  
 QGEGSTILQHISTLESYQRDPLKLVATFRQILQGEKKAVMEQFRHLPMPFHWKQEELKFKTGLRRLQHR  
 VGEIHLREALQKGAEGQVSLHSLIETPANGTGPSEALAMLLQETTGELEAAKALVLRKRIQIWKRQQQL  
 AGNGAPFEESLAPLQERCESLVDIYSQLQQEVGAAGGELEPKTRASLTGRLEVLRLTVTSCFLVEKQPP  
 QVLKTQTKFQAGVRFLLGLRFLGAPAKPPLVRADMVTEKQARELSVPQGPAGAGAESTGEIINNTVPLENS  
 IPGNCCSALFKNLLLKKIKRCERKGTESVTEEKCAVLFSASF TLGPGKLP IQLQALSLPLVVIHGNQDN  
 NAKATILWDNAFSEMDRVPFVVAERVPWEKMCETLNLKFMAEVTNRGLLPEHFLFLAQKIFNDNSLSME  
 AFQHRVSWSQFNKEILLGRGFTFWQWFDGVLDLTKRCLRSYWSDRLLIGFISKQYVTSLLLNEPDGTFLL  
 LRFSDSEIGGITIAHVIRGQDQSPQIENIQPFSAKDLSIRSLGDRIRDLAQLKNLYPKPKDEAFRSHYK  
 PEQMGKDRGRYVPATIKMTVERDQPLTPPELQMPMTMVPSYDLGMAPDSSMSMLGPDMPVQVYPPHSHSI  
 PPYQGLSPEESVNVLSAFQEPHLQMPPSLGQMSLPFDQPHQPGLLPCQPQEHAVSSPDLLCSDVTMVED  
 SCLSQPVTAFQGTWIGEDIFPPLLPTEQDLTKLLLEGQGESGGGSLGAQPLLQPSHYGQSGISMSHMD  
 LRANPSW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

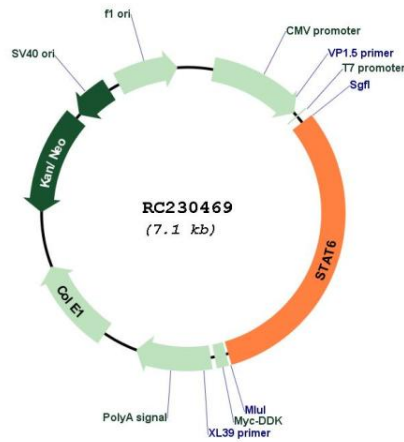
**Cloning Scheme:**



<b>ACCN:</b>	NM_001178080
<b>ORF Size:</b>	2544 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001178080.1</a> , <a href="#">NP_001171551.1</a>
<b>RefSeq Size:</b>	3894 bp
<b>RefSeq ORF:</b>	2214 bp
<b>Locus ID:</b>	6778
<b>UniProt ID:</b>	<a href="#">P42226</a>
<b>Cytogenetics:</b>	12q13.3
<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>	Jak-STAT signaling pathway
<b>MW:</b>	94.1 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 plays a central role in exerting IL4 mediated biological responses. It is found to induce the expression of BCL2L1/BCL-X(L), which is responsible for the anti-apoptotic activity of IL4. Knockout studies in mice suggested the roles of this gene in differentiation of T helper 2 (Th2) cells, expression of cell surface markers, and class switch of immunoglobulins. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

**Product images:**


Circular map for RC230469