

## Product datasheet for **SC329107**

### STAT6 (NM\_001178080) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	STAT6 (NM_001178080) Human Untagged Clone
Tag:	Tag Free
Symbol:	STAT6
Synonyms:	D12S1644; IL-4-STAT; STAT6B; STAT6C
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001178080, the custom clone sequence may differ by one or more nucleotides

```

ATGGAACAGTTCCGCCACTTGCCAATGCCTTTCCACTGGAAGCAGGAAGAACTCAAGTTT
AAGACAGGCTTGGCGAGGCTGCAGCACCAGTAGGGGAGATCCACCTTCTCCGAGAAGCC
CTGCAGAAAGGGGGCTGAGGCTGGCCAAGTGTCTCTGCACAGCTTGATAGAAACTCCTGCT
AATGGGACTGGGCAAGTGAAGCCCTGGCCATGCTACTGCAGGAGACCCTGGAGAGCTA
GAGGCAGCCAAAGCCCTAGTGTCTGAAGAGGATCCAGATTTGGAAACGGCAGCAGCAGCTG
GCAGGGAATGGCGCACCGTTTGAGGAGAGCCTGGCCCCACTCCAGGAGAGGTGTGAAAGC
CTGGTGGACATTTATTCCAGCTACAGCAGGAGGTAGGGGCGGCTGGTGGGGAGCTTGAG
CCCAAGACCCGGGCATCGCTGACTGGCCGGCTGGATGAAGTCTGAGAACCCTCGTCACC
AGTTGCTTCTGGTGGAGAAGCAGCCCCCAGGTAAGTGAAGACTCAGACCAAGTTCCAG
GCTGGAGTTTCGATTCTGTTGGGCTTGGGTTCTGGGGCCCCAGCCAAAGCCTCCGCTG
GTCAGGGCCGACATGGTGACAGAGAAGCAGGCGCGGGAGCTGAGTGTGCCTCAGGGTCTT
GGGCTGGAGCAGAAAGCACTGGAGAAATCATCAACAACACTGTGCCCTTGAGAACAGC
ATTCTGGGAAGTGTCTGCTGCTGCTGTTCAAGAACCTGCTTCTCAAGAAGATCAAGCGG
TGTGAGCGGAAGGCACTGAGTCTGTACAGAGGAGAAGTGCCTGTGCTTCTCTGCC
AGTTCACACTTGGCCCCGGCAAACCTCCCATCCAGCTCCAGGCCCTGTCTCTGCCCTG
GTGGTTCATCGTCCATGGCAACCAAGACAACAATGCCAAAGCCACTATCCTGTGGGACAAT
GCCTTCTCTGAGATGGACCGCTGCCCTTTGTGGTGGCTGAGCGGGTGCCTGGGAGAAG
ATGTGTGAAACTTGAACCTGAAGTTTATGGCTGAGGTGGGGACCAACCGGGGGCTGCTC
CCAGAGCACTTCTCTTCTGGCCAGAAAGATCTTCAATGACAACAGCCTCAGTATGGAG
GCCTTCCAGCACCGTTCTGTGTCCTGGTGCAGTTCACAAAGGAGATCCTGCTGGGCCGT
GGCTTACCTTTTGGCAGTGGTTTGTGATGGTGTCTGGACCTCACCAAACGCTGTCTCCGG
AGCTACTGGTCTGACCGCTGATCATTGGCTTTCATCAGCAAACAGTACGTTACTAGCCTT
CTTCTCAATGAGCCCGACGGAACCTTTCTCTCCGCTTACAGCAGTACAGAGATTGGGGC
ATCACCATTGCCCATGTATCCGGGGCCAGGATGGCTCTCCACAGATAGAGAACATCCAG
CCATTCTCTGCCAAAGACCTGTCCATTGCTCACTGGGGGACCGAATCCGGGATCTTGCT
CAGCTCAAAAATCTCTATCCCAAGAAGCCCAAGGATGAGGCTTCCGGAGCCACTACAAG
CCTGAACAGATGGGTAAGGATGGCAGGGTTATGTCCAGCTACCATCAAGATGACCGTG
GAAAGGGACCAACCACTTCTACCCAGAGCTCCAGATGCCTACCATGGTGCCTTCTTAT
GACCTTGAATGGCCCTGATTCTCCATGAGCATGCAGCTTGGCCAGATATGGTGCC
CAGGTGTACCCACCACACTCTCACTCCATCCCCCGTATCAAGGCCTCTCCCAGAAAGAA
TCAGTCAACGTGTTGTCAGCCTTCCAGGAGCCTCACCTGCAGATGCCCCCAGCCTGGGC
CAGATGAGCCTGCCCTTTGACCAGCCTACCCCCAGGGCTGCTGCCGTGCCAGCCTCAG
GAGCATGCTGTGTCCAGCCCTGACCCCTGCTCTGCTCAGATGTGACCATGGTGGAAAGAC
AGCTGCCTGAGCCAGCCAGTGACAGCGTTTCTCAGGGCACTTGGATTGGTGAAGACATA
TTCCCTCTCTGCTGCCTCCCACTGAACAGGACCTCACTAAGCTTCTCTGGAGGGGCAA
GGGGAGTCGGGGGAGGGTCTTGGGGGCACAGCCCTCCTGCAGCCCTCCCACTATGGG
CAATCTGGGATCTCAATGTCCCACATGGACCTAAGGGCCAACCCAGTTGGTGA

```

**Restriction Sites:** Please inquire  
**ACCN:** NM\_001178080

<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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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

**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]

Transcript Variant: This variant (4) uses an alternate splice site in the 5' UTR, lacks an alternate in-frame exon in the 5' coding region and uses a downstream start codon compared to variant 1. The resulting protein (isoform 2) has a shorter N-terminus compared to isoform 1. Variants 4 and 5 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.