

Product datasheet for **SC311134**

JAK3 (NM_000215) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JAK3 (NM_000215) Human Untagged Clone
Tag:	Tag Free
Symbol:	JAK3
Synonyms:	JAK-3; JAK3_HUMAN; JAKL; L-JAK; LJAK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000215 edited
 CCGGGATCCCGGCTCTGCCCGCCCTTCGAAAGTCCAGGGTCCCCGCCGCTAGGACTGAG
 GGGCTTTTCTCTGTGCCCCAGGCAAGTTGCACTCATGGCACCTCCAAGTGAAGAGAC
 GCCCTGATCCCTCAGCGTTCATGCAGCCTCTTGTCCACGGAGGCTGGTGCCTGCATGT
 GCTGCTGCCCGCTCGGGGCCCGGGCCCCCAGCGCCTATCTTTCTCCTTTGGGGACCA
 CTTGGCTGAGGACCTGTGCGTGCAGGCTGCCAAGGCCAGCGCATCCTGCCTGTGTACCA
 CTCCCTCTTTGCTCTGGCCACGGAGGACCTGTCTGCTGGTTCCCCCGAGCCACATCTT
 CTCCGTGGAGGATGCCAGCACCAAGTCTGCTGTACAGGATTCGCTTTTACTTCCCAA
 TTGGTTTGGGCTGGAGAAGTGCCACCGCTTCGGGCTACGCAAGGATTTGGCCAGTGTAT
 CCTTGACCTGCCAGTCTGGAGCACCTCTTTGCCAGCACCGCAGTGACCTGGTGTGAGTGG
 GCGCCTCCCGTGGCCCTCAGTCTCAAGGAGCAGGGTGTGTCTCAGCCTGGCCGTGTT
 GGACCTGGCCCGATGGCGCAGAGCAGGCCAGCGGCCGGGAGAGCTGCTGAAGACTGT
 CAGCTACAAGGCCTGCCTACCCCAAGCCTGCGCGACCTGATCCAGGGCCTGAGCTTCGT
 GACGCGGAGGCGTATTCCGGAGGACGGTGCAGAGCCCTGCGCCGCGTGGCCGCCTGCCA
 GGCAGACCGGCACTCGCTCATGGCCAAGTACATCATGGACCTGGAGCGGCTGGATCCAGC
 CGGGGCCCGGAGACCTTCCACGTGGCCCTCCCTGGGGCCCTTGGTGGCCACGACGGGCT
 GGGGCTGCTCCGCGTGGCTGGTACGGCGGCATCGCCTGGACCCAGGGAGAACAGGAGGT
 CCTCCAGCCCTTCTGCGACTTTCCAGAAATCGTAGACATTAGCATCAAGCAGGCCCGCG
 CGTTGGCCCGGCGGAGAGCACCGCCTGGTCACTGTTACCAGACAGACAACCAGATTTT
 AGAGGCCGAGTTCAGGCTGCCGAGGCTCTGTGTTGTTGGCGCTCGTGGACGGTA
 CTTCCGGCTGACCACGGACTCCCAGCACTTCTTCTGCAAGGAGGTGGCACCGCCGAGGCT
 GCTGGAGGAAGTGGCCGAGCAGTCCACGGCCCCATCACTCTGGACTTTGCCATCAACAA
 GCTCAAGACTGGGGGCTCACGTCTGGCTCCTATGTTCTCCGCCGAGCCCCAGGACTT
 TGACAGCTTCTCCTCACTGTCTGTGTCCAGAACCCCTTGGTCTGATTATAAGGGCTG
 CCTCATCCGGCGAGCCCCACAGGAACCTTCTTCTGGTTGGCCCTCAGCCGACCCACAG
 CAGTCTTCGAGAGCTCCTGGCAACCTGCTGGGATGGGGGCTGCACGTAGATGGGGTGGC
 AGTGACCCTCACTTCTGCTGTATCCCCAGACCCAAAGAAAAGTCCAACCTGATCGTGGT



[View online >](#)

CCAGAGAGGTCACAGCCCACCCACATCATCCTTGGTTCAGCCCCAATCCCAATACCAGCT
 GAGTCAGATGACATTTCAACAAGATCCCTGCTGACAGCCTGGAGTGGCATGAGAACCTGGG
 CCATGGGTCTTACCAAGATTTACCGGGGCTGTGCCATGAGGTGGTGGATGGGGAGGC
 CCGAAAGACAGAGGTGCTGCTGAAGGTCATGGATGCCAAGCACAAGAAGTGCATGGAGTC
 ATCCTGGAAGCAGCGAGCTTGTAGCCAAAGTGTGACCGGCATCTCGTGTGCTCCA
 CGGCGTGTGCATGGCTGGAGACAGCACCATGGTGCAGGAATTTGTACACCTGGGGCCAT
 AGACATGTATCTGCGAAAACGTGGCCACCTGGTGCCAGCCAGCTGGAAGTGCAGGTGGT
 CAAACAGCTGGCCTACGCCCTCAACTATCTGGAGGACAAAAGGCCTGCCCATGGCAATGT
 CTCTGCCCGGAAGGTGCTCCTGGCTCGGGAGGGGGCTGATGGGAGCCCGCCCTTATCAA
 GCTGAGTGACCCTGGGGTCAGCCCCGCTGTGTTAAGCCTGGAGATGCTCACCGACAGGAT
 CCCCTGGGTGGCCCCGAGTGTCTCCGGGAGGGCGCAGACACTTAGCTTGGAAAGTGACAA
 GTGGGGCTTCGGCGCCACGGTCTGGGAAGTGTAGTGGCGTCACCATGCCCATCAGTGC
 CCTGGATCCTGCTAAGAACTCCAATTTATGAGGACCGGCAGCAGCTGCCGGCCCCAA
 GTGGACAGAGCTGGCCCTGCTGATTCAACAGTGCATGGCCTATGAGCCGGTCCAGAGGCC
 CTCCTCCGAGCGTCATTCTGTGACCTCAATAGCCTCATCTTTCAGACTATGAGCTCCT
 CTCAGACCCACACCTGGTGGCCCTGGCACCTCGTGATGGGCTGTGGAATGGTGGCCAGCT
 CTATGCCTGCCAAGACCCACGATCTTCGAGGAGAGACACCTCAAGTACATCTCACAGCT
 GGGCAAGGGCAACTTTGGCAGCGTGGAGCTGTGCCGCTATGACCCGCTAGGCGACAATAC
 AGGTGCCCTGGTGGCCGTGAAACAGCTGCAGCACAGCGGGCCAGACCAGCAGAGGGACTT
 TCAGCGGGAGATTAGATCCTCAAAGCACTGCACAGTATTTCATTGTCAAGTATCGTGG
 TGTGAGTATGGCCCGGGCCGAGAGCCTGGCGCTGGTATGGAGTACCTGCCAGCGG
 CTGCTTTCGCGACTTCTGCAGCGGCACCGCGCGCCTCGATGCCAGCCGCTCCTTCT
 CTATTCTCGCAGATCTGCAAGGGCATGGAGTACCTGGGCTCCCGCCGCTGCGTGCACCG
 CGACTTGGCCCGCCGAAACATCCTCGTGGAGAGCGAGGCACACGTCGAAGATCGCTGACTT
 CGGCCTAGCTAAGCTGCTGCCGCTTACAAAGACTACTACGTGGTCCGCGAGCCAGGCCA
 GAGCCCCATTTCTGGTATGCCCCGAATCCCTCTCGGACAACATCTTCTCTCGCCAGTC
 AGACGTCTGGAGCTTCGGGGTCTCCTGTACGAGCTTTCACCTACTGCGACAAAAGCTG
 CAGCCCCGCGCCGAGTTCCTGCGGATGATGGGATGTGAGCGGGATGCCCCGCCCTCTG
 CCGCCTCTTGAAGTCTGGAGGAGGGCCAGAGGCTGCCGGCGCCTCCTGCTGCCCTGC
 TGAGGTTACAGAGCTCATGAAGTGTGCTGGGCCCTAGCCACAGGACCGGCCATCATT
 CAGCGCCCTGGGCCCCAGCTGGACATGCTGTGGAGCGGAAGCCGGGGTGTGAGACTCA
 TGCCCTTACTGCTCACCCAGAGGGCAAACACCACTCCCTGTCTTTTCATAGCTCCTGCC
 CGCAGACCTCTGGATTAGGTCTCTGTTGACTGGCTGTGTGACCTTAGGCCCGGAGCTGCC
 CCTCTCTGGGCCCTCAGAGGCCTTATGAGGGTCTCTACTTCAGGAACACCCCCACGACAT
 TGCATTTGGGGGGCTCCCGTGGCCTGTAGAATAGCCTGTGGCCTTTGCAATTTGTTAAG
 GTTCAAGACAGATGGGCATATGTGTGAGTGGGGCTCTCTGAGTCTGGCCCAAAGAAGCA
 AGGAACCAAAATTAAGACTCTCGCATCTCCCAACCCCTAAGCCCTGGCCCCCTGAGTT
 TCCTTTTCTGTCTCTCTTTTTATTTTTTATTTTTATTTTTATTTTTGAGACAGAGC
 CTCGCTGTATTACCCAGGGTGGAGTGCAGTGGTGCATCTCGGCTCAGTGCAACCTCTGC
 TTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGTG
 CACCACCACACCCGGTAATTTTTTTTTATTTTTAATAGAGATGAGGTTTACCATGATGG
 CCAGGCTGATCTCGAACTCCTAACCTCAAGTATCCTCCACCTCAGCCTCCCAAAGTGT
 TGAATAATAGGCATGAGCCACTGCACCCAGGCTTTTTTTTTTTAAATTTATTATTATT
 ATTTTTAAGACAGGATCTTGCTACGTTGCCAGGCTGGTCTTGAACCTCTGGGCTACA
 GTGATCCTCCTGCCTTATCCTCCTAAATAGCTGGGACTACAGCACCTAGTTTTGAGTTTC
 CTGTCTTATTTCCAATGGGGACATTCATGTAGCTTTTTTTTTTTTTTTTTTTGAGACG
 GAGTCTCGCTCTGTGCCAGGCTGGAGTACAGTGGCGCAATCTAGGCTCACTGCAAGCT
 CCGCCTCCTGGTTCACACCATTCTCTGCCTCAGCCTCCAAGTAGCTGGGACTACAGG
 CGCCCGCCACCACACCCGGTAATTTTTGTATTTTTAGTAGAGACGGGGTTTACACCTTG
 TTAGCCAGGATGGTTCCATCTCCTGACCTCGTGATCTGCCCGTCTCGGCCTCCCAAAGT
 GCTGGGATTACAGGCATGAGCCACTGCGCCCGGCCCTCATGTAGCTTTAAATGTATGATC
 TGACTTCTGCTCCCCGATCTCTGTTTCTCTGGAGGAAGCCAAGGACAAGAGCAGTTGCTG

TGGCTGGGACTCTGCCTTTTAGGGGAGCCCGTGTATCTCTTTGGGATCCTGAAAGGGGGC
 AGGAAAGGCTGGGGTCCCAGTCCACCCTAATGGTATCTGAGTGTCTAGGGCTTCAGTTT
 TCCCACCTGTCCAATGGGACCCTTTCTGTCTCACCTACAAGGGGCACAAAGGGATGAC
 ACCAAACCTGGCAGGAACTTTTCACGCAATCAAGGGAAGGAAAGGCATTCCTGGCAGAGG
 GAACAGCATGCCAAGCGTGAGAAGGCTCAGAGTAAGGAGGTTAAGAGCCCAAGTATTGGA
 GCCTACAGTTTTGCCCTTCCATGCAGTGTGACAGTGGGCAAGTTCCTTTCCCTCTGTG
 GTCTCAGTTCTGTCCCCTGCAAAATGGTCAGAGCTTACCCTTGGCTGTGCAGGGTCAAC
 TTTCTGACTGGTGAGAGGATTCTCATGCAGGTTAAGCTTCTGCTGCTCCTCACCTG
 CAAAGCTTTTCTGCCACTTTTGCCTCCTTGAAAACTCTTATCCATCTCTCAAACTCCA
 GCTACCACATCCTTGACGCTTCCCTCATATACCCCACTACTACTGTAGCCCTGTCTT
 CCCTCCAGCCCCACTCTGGCCCTGGGGCTGGGGAAGTGTCTGTGTCCAGCTGTCTCCCT
 GACCTCAGGGTTCCTTGGGGCTGGGCTGAGGCCTCAGTACAGAGGGGGCTCTGGAATG
 TTTGTTGACTGAATAAGGAATTCAGGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000215 unedited
 CGGCACACGACGCCAACTAACAAAGGGGGCGGCCGCAACCCCGGGAACCTCGGCCCGCC
 CGCCCTCCGAAGCCAGGGCCCCCGCCGCGCAGGACCGGGAGCCCTCCTCTCCGTGCCCC
 GGCAAGCCGCACTCACGGCACCCCAAGCGAAGAGACGCCCCGATCCCTCAGCGTTCAT
 GCAGCCTCTCGTCCACGGAGGCTGGTGCCTGCATGTGCTGTGCCCGCTCGGGGCCCCG
 GGCCCCCAGCGCTATCTTTCTCCTTTGGGGACCACTTGGCTGAGGACCTGTGCGTGC
 AGGCTGCCAAGGCCAGCGCATCCTGCCTGTGTACCCTCCTCTTTGCTGTGGCCACGG
 AGGACCTGTCTGCTGGTTCCTCCCGAGCCACATCTTCTCCGTGGAGGATGCCAGACCC
 AAGTCTGCTGTACAGGATTCGCTTTTACTTCCCAATTGGTTTGGGCTGGAGAAGTGCC
 ACCGCTTCGGGCTACGCAAGGATTTGGCCAGTGTATCCTTGACCTGCCAGTCTGGAGC
 ACCTCTTTGCCAGCACCGCAGTGACCTGGTGAGTGGGCGCTCCCGTGGGCTCAGTC
 TCAAGGAGCAGGGTGAGTGTCTCAGCCTGGCCGTGTTGGACCTGGCCCGGATGGCGCGAG
 AGCAGGCCCAGCGCCGGGAGAGCTGTGAAGACTGTGAGTACAAGGCCTGCCTACCC
 CAAGCCTGCGCGACCTGATCCAGGGCCTGAGCTTCGTGACGCGGAGGCGTATTCGGAGGA
 CGGTGCGCAGAGCCCTGCGCCGCTGGCCGCTGCCAGGCAGACCGCACTCGCTCATGACA
 GTACATCATGACCTGAGCGCTGATCCAGCCGGGCGCCGAGACCTTCCACGTGGCCTCC
 CT

3' Read Nucleotide Sequence:

>Forward primer walk for NM_000215 unedited
 NNNCCGTGGCGAGACNAGNCACACGTNCAGGTACGCTGNACTTCGCTAGCTAAGCTGCT
 GCCGCTTGACAAAGACTACTACGTGGTCCGCGAGCCAGGCCAGAGCCCCATTTTCTGGTA
 TGCCCCGAATCCCTCTCGGACAACATCTTCTCTCGCCAGTCAGACGCTTGGAGCTTCGG
 GGTGCTCCTGTACGAGCTTTCACCTACTGCGACAAAAGCTGCAGCCCTCGGCCGAGTT
 CCTGCGGATGATGGGATGTGAGCGGGATGTCCCGCCCTCTGCCGCTCTTGAAGTGT
 GGAGGAGGGCCAGAGGCTGCCGGCGCCTCCTGCCTGCCCTGCTGAGGTTACGAGCTCAT
 GAAGCTGTGCTGGGCCCTAGCCACAGGACCGGCCATCATTAGCGCCCTGGGCCCCCA
 GCTGGACATGCTGTGGAGCGGAAGCCGGGGGTGTGAGACTCATGCCTTCACTGCTCACCC
 AGAGGGCAAAACCACTCCCTGTCTTTTTCATAGCTCCTGCCCGAGACCTCTGGATTAG
 GTCTCTGTTGACTGGCTGTGTGACCTTAGGCCCGAGCTGCCCTCTCTGGCCCTCAGAG
 GCCTTATGAGGGTCTCTACTTCAGGAACACCCACGACATTGCATTTGGGGGGCTCC
 CGTGGCCTGTAGAATAGCCTGTGGCCTTTGCAATTTGTTAAGGTTCAAGACAGATGGGCA
 TATGTGTGACTGGGGCTCTGTGAGTCTGGCCANAAAGCAGGAACCAAAATTAAGACTCT
 CGCATCTTCCCAACCCCTTAAGCCCTGGCCCCCTGAGTTTCTTTTTCAGGCNCTCTCTTT
 TTATTTTTTTATTTTTATTTTTATTTTTGAGACGAGCCTCGCTCTGTTACCCAGGGTGG
 G

Restriction Sites:

Please inquire

ACCN:

NM_000215

Insert Size:	5500 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:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	NM_000215.2 , NP_000206.2
RefSeq Size:	4025 bp
RefSeq ORF:	3375 bp
Locus ID:	3718
UniProt ID:	P52333
Cytogenetics:	19p13.11
Domains:	B41, pkinase, SH2, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chemokine signaling pathway, Jak-STAT signaling pathway, Primary immunodeficiency

Gene Summary:

The protein encoded by this gene is a member of the Janus kinase (JAK) family of tyrosine kinases involved in cytokine receptor-mediated intracellular signal transduction. It is predominantly expressed in immune cells and transduces a signal in response to its activation via tyrosine phosphorylation by interleukin receptors. Mutations in this gene are associated with autosomal SCID (severe combined immunodeficiency disease). [provided by RefSeq, Jul 2008]