OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC115595

STAT1 (NM_007315) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT1 (NM_007315) Human Untagged Clone
Tag:	Tag Free
Symbol:	STAT1
Synonyms:	CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_007315 edited
CTGTGTATATAACCTCGACAGTCTTGGCACCTAACGTGCTGTGCGTAGCTGCTCCTTTGG
TTGAATCCCCAGGCCCTTGTTGGGGCACAAGGTGGCAGGATGTCTCAGTGGTACGAACTT
CAGCAGCTTGACTCAAAATTCCTGGAGCAGGTTCACCAGCTTTATGATGACAGTTTTCCC
ATGGAAATCAGACAGTACCTGGCACAGTGGTTAGAAAAGCAAGACTGGGAGCACGCTGCC
AATGATGTTTCATTTGCCACCATCCGTTTTCATGACCTCCTGTCACAGCTGGATGATCAA
TATAGTCGCTTTTCTTTGGAGAATAACTTCTTGCTACAGCATAACATAAGGAAAAGCAAG
CGTAATCTTCAGGATAATTTTCAGGAAGACCCAATCCAGATGTCTATGATCATTTACAGC
TGTCTGAAGGAAGAAAGGAAAATTCTGGAAAACGCCCAGAGATTTAATCAGGCTCAGTCG
GGGAATATTCAGAGCACAGTGATGTTAGACAAACAGAAAGAGCTTGACAGTAAAGTCAGA
AATGTGAAGGACAAGGTTATGTGTATAGAGCATGAAATCAAGAGCCTGGAAGATTTACAA
GATGAATATGACTTCAAATGCAAAACCTTGCAGAACAGAGAACACGAGACCAATGGTGTG
GCAAAGAGTGATCAGAAACAAGAACAGCTGTTACTCAAGAAGATGTATTTAATGCTTGAC
AATAAGAGAAAGGAAGTAGTTCACAAAATAATAGAGTTGCTGAATGTCACTGAACTTACC
CAGAATGCCCTGATTAATGATGAACTAGTGGAGTGGAAGCGGAGACAGCAGAGCGCCTGT
ATTGGGGGGCCGCCCAATGCTTGCTTGGATCAGCTGCAGAACTGGTTCACTATAGTTGCG
GAGAGTCTGCAGCAAGTTCGGCAGCAGCTTAAAAAGTTGGAGGAATTGGAACAGAAATAC
ACCTACGAACATGACCCTATCACAAAAAACAAACAAGTGTTATGGGACCGCACCTTCAGT
CTTTTCCAGCAGCTCATTCAGAGCTCGTTTGTGGTGGAAAGACAGCCCTGCATGCCAACG
CACCCTCAGAGGCCGCTGGTCTTGAAGACAGGGGTCCAGTTCACTGTGAAGTTGAGACTG
TTGGTGAAATTGCAAGAGCTGAATTATAATTTGAAAGTCAAAGTCTTATTTGATAAAGAT
GTGAATGAGAGAAATACAGTAAAAGGATTTAGGAAGTTCAACATTTTGGGCACGCACACA
AAAGTGATGAACATGGAGGAGTCCACCAATGGCAGTCTGGCGGCTGAATTTCGGCACCTG
CAATTGAAAGAACAGAAAAATGCTGGCACCAGAACGAATGAGGGTCCTCTCATCGTTACT
GAAGAGCTTCACTCCCTTAGTTTTGAAACCCAATTGTGCCAGCCTGGTTTGGTAATTGAC
CTCGAGACGACCTCTCTGCCCGTTGTGGTGATCTCCAACGTCAGCCAGCTCCCGAGCGGT
TGGGCCTCCATCCTTTGGTACAACATGCTGGTGGCGGAACCCAGGAATCTGTCCTTCTTC
CTGACTCCACCATGTGCACGATGGGCTCAGCTTTCAGAAGTGCTGAGTTGGCAGTTTTCT
TCTGTCACCAAAAGAGGTCTCAATGTGGACCAGCTGAACATGTTGGGAGAGAAGCTTCTT
GGTCCTAACGCCAGCCCCGATGGTCTCATTCCGTGGACGAGGTTTTGTAAGGAAAATATA
AATGATAAAAATTTTCCCTTCTGGCTTTGGATTGAAAGCATCCTAGAACTCATTAAAAAA
CACCTGCTCCCTCTCTGGAATGATGGGTGCATCATGGGCTTCATCAGCAAGGAGCGAGAG
CGTGCCCTGTTGAAGGACCAGCAGCCGGGGACCTTCCTGCTGCGGTTCAGTGAGAGCTCC
CGGGAAGGGGCCATCACATTCACATGGGTGGAGCGGTCCCAGAACGGAGGCGAACCTGAC
TTCCATGCGGTTGAACCCTACACGAAGAAAGAACTTTCTGCTGTTACTTTCCCTGACATC
ATTCGCAATTACAAAGTCATGGCTGCTGAGAATATTCCTGAGAATCCCCTGAAGTATCTG
TATCCAAATATTGACAAAGACCATGCCTTTGGAAAGTATTACTCCAGGCCAAAGGAAGCA
CCAGAGCCAATGGAACTTGATGGCCCTAAAGGAACTGGATATATCAAGACTGAGTTGATT
TCTGTGTCTGAAGTTCACCCTTCTAGACTTCAGACCACAGACAACCTGCTCCCCATGTCT
CCTGAGGAGTTTGACGAGGTGTCTCGGATAGTGGGCTCTGTAGAATTCGACAGTATGATG
AACACAGTATAGAGCATGAATTTTTTTCATCTTCTCTGGCGACAGTTTTCCTTCTCATCT
GTGATTCCCTCCTGCTACTCTGTTCCTTCACATCCTGTGTTTCTAGGGAAAT

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_007315 unedited
GTTCANATTTGTATCCGACTCCTATAGGCGGCCGCGCAATTCGCACGAGGGTTTCATTTG
CTGTATGCCATCCTCGAGAGCTGTCTAGGTTAACGTTCGCACTCTGTGTATATAACCTCG
ACAGTCTTGGCACCTAACGTGCTGTGCGTAGCTGCTCCTTTGGTTGAATCCCCAGGCCCT
TGTTGGGGCACAAGGTGGCAGGATGTCTCAGTGGTACGAACTTCAGCAGCTTGACTCAAA
ATTCCTGGAGCAGGTTCACCAGCTTTATGATGACAGTTTTCCCATGGAAATCAGACAGTA
CCTGGCACAGTGGTTAGAAAAGCAAGACTGGGAGCACGCTGCCAATGATGTTTCATTTGC
CACCATCCGTTTTCATGACCTCCTGTCACAGCTGGATGATCAATATAGTCGCTTTTCTTT
GGAGAATAACTTCTTGCTACAGCATAACATAAGGAAAAGCAAGCGTAATCTTCAGGATAA
TTTTCAGGAAGACCCAATCCAGATGTCTATGATCATTTACAGCTGTCTGAAGGAAGAAAG
GAAAATTCTGGAAAACGCCCAGAGATTTAATCAGGCTCAGTCGGGGAATATTCAGAGCAC
AGTGGATGTTAGACAAACAGAAAGAGCTTGACAGTAAAGTCAGAAATGTGAAGGACAAGG
GTTATGTGTATAGAGCATGAAATCAAGAAGCCTGNAAGATTTACAAGATGAATATGACTT
CAAATGCAAAACCTTGCAGAACAGAGAACACGAGACCANATGGTGTGGCCAAAGNAGTGA
TCAGAAACAAGAACAGCTGTTACTCAAAAAGATGTATTTAATGCTTGACATAAGAGAAGG
GAAGTAGTTCACAAATNAATAGAGTGCTGAATGTCACTGAACTTACCCAGATGCCCTGAT
TATGATAACTANTGAAGTGGAAGCGAGACACAAACGCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_007315 unedited
ATGGCAACTCTCCAGGNCCAGGNATAGCACTGGGGAGGGGTCACAGGGATGCCACCCGGG
ATCTGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTT
TTTTTTTTTTTTTTTTTTTTTTTTTTTGGATGCAGGGCCACGGAAAGCACTGGGGGCATA
TTATATTTAATGCAATACAGATACTTTAACTTTAATTTTAAAACAAAACTCAAGAAATTT
TTATCTCCACCAAAAAAAAATACAGCATTTGCATGAAAATATAGTTGGGGGAGCAGTAGG
GGAAAAACAAGATACCGCCCCATAAACAGCAGTATGTAAAAGGGAAAAACCTTGGCAAAC
CCATCTCTTAATCTACTTTTTGGGGCAGGGATAAGGAAGGAAAAAGGGAAAAATACAGTA
TACTTCACGAAACATCATCCACTCAAAAAAGGGTCTGGAAAAAGTACAGGAGAGAGAATG
GAACCCTTCGCAAATGGGAAAAACACATATATCAGCGAAACATATGCCGTTCTCAATGCA
GTTACATAAGAAATGAGTTTTGAAAAGAACTGAATCTCATATTATCTCTGGGGGATTATT
CAAGGTGGCAGGTACTGGTTTTTCTACTCCTTTCCCAATTTTGTGGGTAATAGACTAAAT
ACCACCCTAATAACAAAAAGGACAAAGTAGCCCATTTAAGAAACATGAATTAAATTTCTG
AGTTTATCTACATCTATGGGTAATTTCAACTTTNGGAATGAGGGGGTTGGGGAATAGCCC
TAACTCCCCTCGGGAGGAACTGTAAAAATAATTTGGTTGTGACCAAGATGAAAGCAGAAT
GTGTTTCAGCTTTGATATCAAACACCACTTGGGAATNGGGAAAAGNACATCCTTCTATTG
GAATATAAA

Restriction Sites: NotI-NotI

ACCN: NM_007315

Insert Size: 3750 bp

OTI Disclaimer:	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. 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
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_007315.2, NP_009330.1
RefSeq Size:	4157 bp
RefSeq ORF:	2253 bp
Locus ID:	6772
UniProt ID:	P42224
Cytogenetics:	2q32.2
Domains:	SH2, STAT
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Chemokine signaling pathway, Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer, Toll-like receptor signaling pathway

Gene Summary: The protein encoded by this gene is a member of the STAT protein family. 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. The protein encoded by this gene can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. The protein plays an important role in immune responses to viral, fungal and mycobacterial pathogens. Mutations in this gene are associated with Immunodeficiency 31B, 31A, and 31C. [provided by RefSeq, Jun 2020]
Transcript Variant: This variant (alpha) encodes the longer protein (isoform alpha).