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 RC206892

STAT4 (NM_003151) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT4 (NM_003151) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAT4
Synonyms:	SLEB11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206892 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCAGTGGAATCAAGTCCAACAGTTAGAAATCAAGTTTTTGGAGCAGGTGGATCAATTCTATGATG
ACAACTTTCCCATGGAAATTCGGCATCTGTTGGCCCAATGGATTGAAAATCAAGACTGGGAGGCAGCTTC
TAACAATGAAACCATGGCAACGATTCTTCTTCAAAACTTGTTAATACAACTGGATGAACAGTTAGGTCGT
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AGGAATGTGGAGCACAAAGTGGCTGCCATTAAAAACAGTGTGCAGATGACAGAACAAGATACCAAATACT
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GAGGCTCTCAGTAAAATGACCCAAATCATCCATGAGACAGACCTGTTAATGAACACCATGCTCATAGAAG
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GAGCAATCTACCAAAATGACATATGAAGGTGATCCCATTCCAATGCAAAGAACTCACATGCTAGAAAGAG
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CCAGAACTAAACTATCAGGTAAAGGTTAAGGCATCAATTGACAAGAATGTTTCAACTCTAAGCAACCGAA
GATTTGTACTTTGTGGAACTAATGTCAAAGCCATGTCTATTGAAGAATCTTCCAATGGGAGTCTCTCAGT
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ATGGTGACTGAAGAACTTCATTCCATAACGTTTGAAACACAGATCTGCCTCTATGGCCTGACCATAGATT
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CATTTGGTACAACGTGTCAACCAACGATTCCCAGAACTTGGTTTTCTTTAATAATCCTCCACCTGCCACA
TTGAGTCAACTACTGGAGGTGATGAGCTGGCAGTTTTCATCGTACGTTGGTCGTGGTCTTAACTCAGATC
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GTTCTGCAAGGAACATTTACCTGGTAAATCATTTACCTTTTGGACATGGCTTGAAGCAATATTGGATCTA
ATTAAGAAACACATTCTTCCCCTTTGGATTGATGGGTATGTCATGGGCTTTGTTAGCAAAGAGAAGGAAC
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CTGAAAACCCTCTGAAGTACCTATATCCTGACATTCCCAAAGACAAAGCCTTCGGTAAACACTACAGCTC
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ATCTCAACAATCCGAAGTGATTCAACAGAGCCACATTCTCCATCAGACCTTCTTCCCATGTCTCCAAGTG
TGTATGCGGTGTTGAGAGAAAACCTGAGTCCCACAACAATTGAAACTGCAATGAAGTCTCCTTATTCTGC
TGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206892 protein sequence
Red=Cloning site Green=Tags(s)

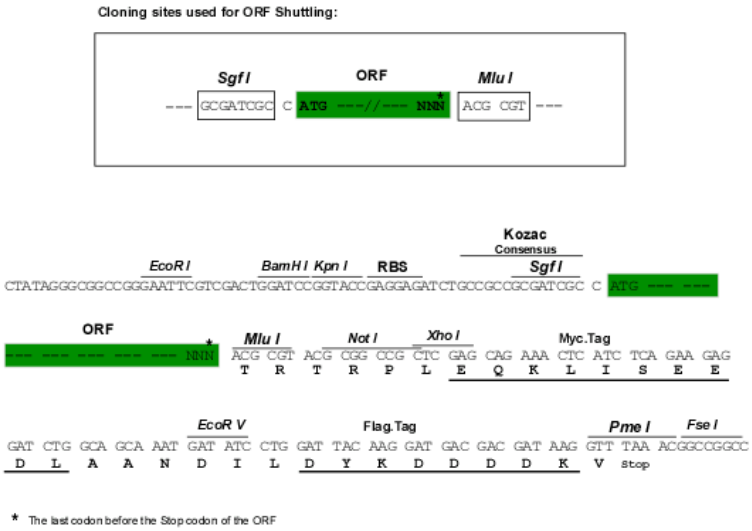
MSQWNQVQQLEIKFLEQVDQFYDDNFPMEIRHLLAQWIENQDWEAASNNETMATILLQNLLIQLDEQLGR
VSKEKNLLLIHNLKRIRKVLQGKFHGNPMHVAVVISNCLREERRILAAANMPVQGPLEKSLQSSSVSERQ
RNVEHKVAAIKNSVQMTEQDTKYLEDLQDEFDYRYKTIQTMDQSDKNSAMVNQEVLTLQEMLNSLDFKRK
EALSKMTQIIHETDLLMNTMLIEELQDWKRRQQIACIGGPLHNGLDQLQNCFTLLAESLFQLRRQLEKLE
EQSTKMTYEGDPIPMQRTHMLERVTFLIYNLFKNSFVVERQPCMPTHPQRPLVLKTLIQFTVKLRLLIKL
PELNYQVKVKASIDKNVSTLSNRRFVLCGTNVKAMSIEESSNGSLSVEFRHLQPKEMKSSAGGKGNEGCH
MVTEELHSITFETQICLYGLTIDLETSSLPVVMISNVSQLPNAWASIIWYNVSTNDSQNLVFFNNPPPAT
LSQLLEVMSWQFSSYVGRGLNSDQLHMLAEKLTVQSSYSDGHLTWAKFCKEHLPGKSFTFWTWLEAILDL
IKKHILPLWIDGYVMGFVSKEKERLLLKDKMPGTFLLRFSESHLGGITFTWVDHSESGEVRFHSVEPYNK
GRLSALPFADILRDYKVIMAENIPENPLKYLYPDIPKDKAFGKHYSSQPCEVSRPTERGDKGYVPSVFIP
ISTIRSDSTEPHSPSDLLPMSPSVYAVLRENLSPTTIETAMKSPYSAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6202_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003151

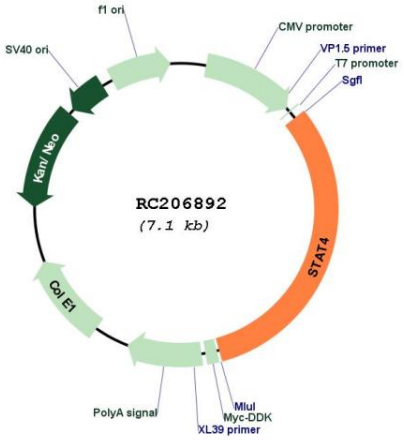
ORF Size: 2244 bp

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

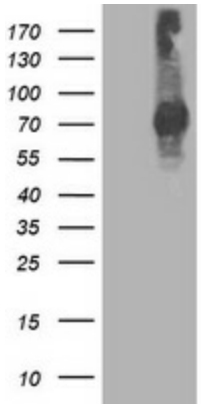
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_003151.4
RefSeq Size:	2840 bp
RefSeq ORF:	2247 bp
Locus ID:	6775
UniProt ID:	Q14765
Cytogenetics:	2q32.2-q32.3
Domains:	SH2, STAT
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Jak-STAT signaling pathway
MW:	85.9 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 is essential for mediating responses to IL12 in lymphocytes, and regulating the differentiation of T helper cells. Mutations in this gene may be associated with systemic lupus erythematosus and rheumatoid arthritis. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Aug 2011]

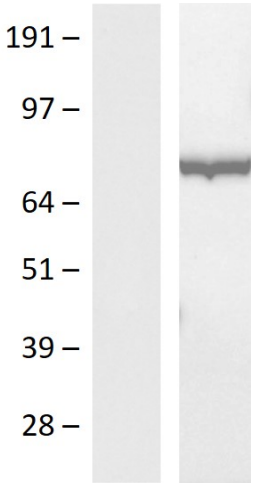
Product images:



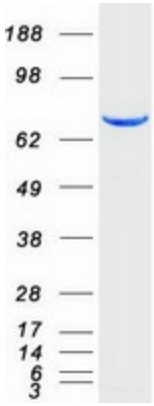
Circular map for RC206892



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STAT4 (Cat# RC206892, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STAT4(Cat# [TA503041]). Positive lysates [LY401095] (100ug) and [LC401095] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401095]) using anti-DDK antibody (Cat# [TA592569]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206892 using transfection reagent PEI.



Coomassie blue staining of purified STAT4 protein (Cat# [TP306892]). The protein was produced from HEK293T cells transfected with STAT4 cDNA clone (Cat# RC206892) using MegaTran 2.0 (Cat# [TT210002]).