

Product datasheet for **RC208592**

STAT2 (NM_005419) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT2 (NM_005419) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAT2
Synonyms:	IMD44; ISGF-3; P113; PTORCH3; STAT113
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208592 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGCAGTGGGAAATGCTGCAGAATCTTGACAGCCCCTTTCAGGATCAGCTGCACCAGCTTTACTCGC
 ACAGCCTCCTGCCTGTGGACATTCGACAGTACTTGGCTGTCTGGATTGAAGACCAGAAGTGGCAGGAAGC
 TGCACTTGGGAGTGATGATTCCAAGGCTACCATGCTATTCTTCCACTTCTTGATCAGCTGAACTATGAG
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 GCCAACTGAAAGACCAGCAGGATGTCTTCTGCTCCGATATAAGATCCAGGCCAAAGGGAAGACACCCTC
 TCTGGACCCCATCAGACCAAAGAGCAGAAGATCTGCAGGAACTCTCAATGAACTGGACAAAAGGAGA
 AAGGAGGTGCTGGATGCCTCAAAGCACTGCTAGGCCGATTAACCTACCCTAATCGAGCTACTGCTGCCAA
 AGTTGGAGGAGTGAAGGCCAGCAGCAAAAAGCCTGCATCAGAGCTCCCATTGACCACGGGTTGGAACA
 GCTGGAGACATGGTTCACAGCTGGAGCAAAGCTGTTGTTTACCTGAGGCAGCTGCTGAAGGAGCTGAAG
 GGACTGAGTTGCCTGGTTAGCTATCAGGATGACCCTCTGACCAAAGGGTGGACCTACGCAACGCCCAGG
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 GGAAGTTCAACATTTGACTTCAAACAGAAAACCTTACCCCGGAGAAGGGGCAGAGTCAGGGTTTGAT
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 TCACAAAACAGTGCCAGAGCCAGACCAAGGACCTGTATCACAGCCAGTGCCAGAGCCAGATTTGCCCTGTG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208592 protein sequence
 Red=Cloning site Green=Tags(s)

MAQWEMLQNLDSPFQDQLHQLYSHSLLPVDIRQYLAVWIEDQNWQEAALGSDDSKATMLFFHFLDQLNYE
 CGRCSQDPESLLLQHNLRKFCRDIQPFSDPTQLAEMIFNLLLEEKRILIQAQRAQLEQGEVLETPVES
 QQHEIESRILDLRAMMEKLVKSI S Q L K D Q D V F C F R Y K I Q A K G K T P S L D P H O T K E Q K I L Q E T L N E L D K R R
 KEVLDASKALLGRLTTLIELLLPKLEEWKAQQQKACIRAPIDHGLEQLEWFTAGAKLLFHLRQLLKEK
 GLSCLVSYQDDPLTKGVDLRNAQVTELLQRLLHRAFVVE T Q P C M P Q T P H R P L I L K T G S K F T V R T R L L V R L
 QEGNESLTVESIDRNPPQLQGFRKFNILTSNQTLPVVIISNMNQLSIAWASLVWFNLLSPNLQNNQQFFSNPPK
 PLGVTEELHIISFTVKYTYQGLKQELKTD T L P V V I I S N M N Q L S I A W A S L V W F N L L S P N L Q N N Q Q F F S N P P K
 APWSLLGPALSWQFSSYVGRGLNSDQLSMLRNKLFQGNCRTEPLL SWADFTKRESPPGKLPFWTWLDKI
 LELVHDHLKDLWNDGRIMGFVSRSQERRLLKKTMSGTFLLRFSESSEGGITCSWVEHQDDDKVLIYSVQP
 YTKEVLQSLPLTEIIRHYQLL TEENIPENPLRFLYPRIPRDEAFGCYYQEKVNLQERRKYLKHRLIVVSN
 RQVDELQQPLELKPPELESLELELGLVPEPELSLDLEPLLKAGLDL GPELESVLESTLEPVIEPTLCMV
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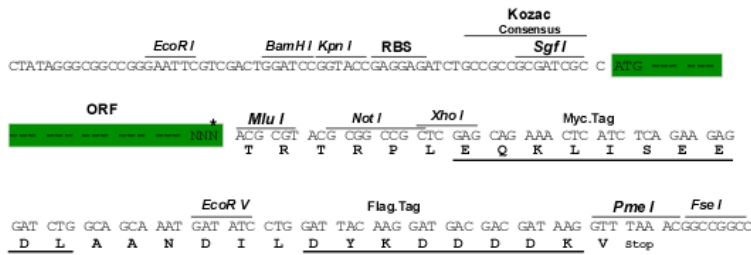
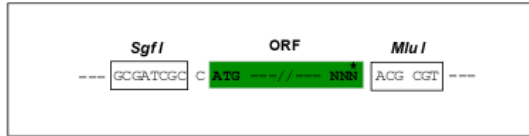
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6254_b11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

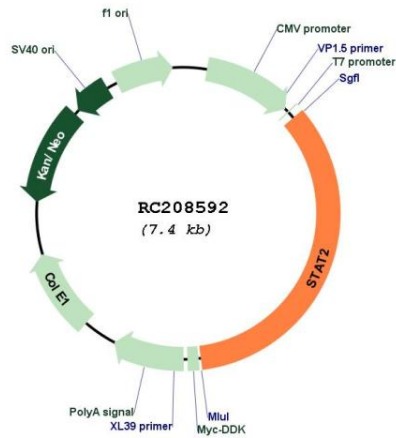


* The last codon before the Stop codon of the ORF

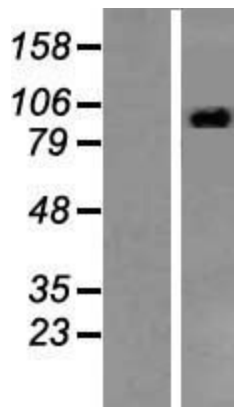
ACCN:	NM_005419
ORF Size:	2553 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005419.4
RefSeq Size:	4576 bp
RefSeq ORF:	2556 bp
Locus ID:	6773
UniProt ID:	P52630
Cytogenetics:	12q13.3
Domains:	SH2, STAT
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Chemokine signaling pathway, Jak-STAT signaling pathway
MW:	97.9 kDa

Gene Summary:

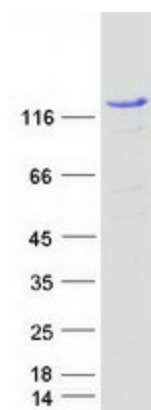
The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. The protein mediates innate antiviral activity. Mutations in this gene result in Immunodeficiency 44. [provided by RefSeq, Aug 2020]

Product images:


Circular map for RC208592



Western blot validation of overexpression lysate (Cat# [LY417313]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208592 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STAT2 protein (Cat# [TP308592]). The protein was produced from HEK293T cells transfected with STAT2 cDNA clone (Cat# RC208592) using MegaTran 2.0 (Cat# [TT210002]).