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 RG208592

STAT2 (NM_005419) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STAT2 (NM_005419) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STAT2
Synonyms:	IMD44; ISGF-3; P113; PTORCH3; STAT113
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG208592 representing NM_005419
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCAGTGGGAAATGCTGCAGAATCTTGACAGCCCCTTTCAGGATCAGCTGCACCAGCTTTACTCGC
ACAGCCTCCTGCCTGTGGACATTCGACAGTACTTGGCTGTCTGGATTGAAGACCAGAACTGGCAGGAAGC
TGCACTTGGGAGTGATGATTCCAAGGCTACCATGCTATTCTTCCACTTCTTGGATCAGCTGAACTATGAG
TGTGGCCGTTGCAGCCAGGACCCAGAGTCCTTGTTGCTGCAGCACAATTTGCGGAAATTCTGCCGGGACA
TTCAGCCCTTTTCCCAGGATCCTACCCAGTTGGCTGAGATGATCTTTAACCTCCTTCTGGAAGAAAAAAG
AATTTTGATCCAGGCTCAGAGGGCCCAATTGGAACAAGGAGAGCCAGTTCTCGAAACACCTGTGGAGAGC
CAGCAACATGAGATTGAATCCCGGATCCTGGATTTAAGGGCTATGATGGAGAAGCTGGTAAAATCCATCA
GCCAACTGAAAGACCAGCAGGATGTCTTCTGCTTCCGATATAAGATCCAGGCCAAAGGGAAGACACCCTC
TCTGGACCCCCATCAGACCAAAGAGCAGAAGATTCTGCAGGAAACTCTCAATGAACTGGACAAAAGGAGA
AAGGAGGTGCTGGATGCCTCCAAAGCACTGCTAGGCCGATTAACTACCCTAATCGAGCTACTGCTGCCAA
AGTTGGAGGAGTGGAAGGCCCAGCAGCAAAAAGCCTGCATCAGAGCTCCCATTGACCACGGGTTGGAACA
GCTGGAGACATGGTTCACAGCTGGAGCAAAGCTGTTGTTTCACCTGAGGCAGCTGCTGAAGGAGCTGAAG
GGACTGAGTTGCCTGGTTAGCTATCAGGATGACCCTCTGACCAAAGGGGTGGACCTACGCAACGCCCAGG
TCACAGAGTTGCTACAGCGTCTGCTCCACAGAGCCTTTGTGGTAGAAACCCAGCCCTGCATGCCCCAAAC
TCCCCATCGACCCCTCATCCTCAAGACTGGCAGCAAGTTCACCGTCCGAACAAGGCTGCTGGTGAGACTC
CAGGAAGGCAATGAGTCACTGACTGTGGAAGTCTCCATTGACAGGAATCCTCCTCAATTACAAGGCTTCC
GGAAGTTCAACATTCTGACTTCAAACCAGAAAACTTTGACCCCCGAGAAGGGGCAGAGTCAGGGTTTGAT
TTGGGACTTTGGTTACCTGACTCTGGTGGAGCAACGTTCAGGTGGTTCAGGAAAGGGCAGCAATAAGGGG
CCACTAGGTGTGACAGAGGAACTGCACATCATCAGCTTCACGGTCAAATATACCTACCAGGGTCTGAAGC
AGGAGCTGAAAACGGACACCCTCCCTGTGGTGATTATTTCCAACATGAACCAGCTCTCAATTGCCTGGGC
TTCAGTTCTCTGGTTCAATTTGCTCAGCCCAAACCTTCAGAACCAGCAGTTCTTCTCCAACCCCCCCAAG
GCCCCCTGGAGCTTGCTGGGCCCTGCTCTCAGTTGGCAGTTCTCCTCCTATGTTGGCCGAGGCCTCAACT
CAGACCAGCTGAGCATGCTGAGAAACAAGCTGTTCGGGCAGAACTGTAGGACTGAGGATCCATTATTGTC
CTGGGCTGACTTCACTAAGCGAGAGAGCCCTCCTGGCAAGTTACCATTCTGGACATGGCTGGACAAAATT
CTGGAGTTGGTACATGACCACCTGAAGGATCTCTGGAATGATGGACGCATCATGGGCTTTGTGAGTCGGA
GCCAGGAGCGCCGGCTGCTGAAGAAGACCATGTCTGGCACCTTTCTACTGCGCTTCAGTGAATCGTCAGA
AGGGGGCATTACCTGCTCCTGGGTGGAGCACCAGGATGATGACAAGGTGCTCATCTACTCTGTGCAACCG
TACACGAAGGAGGTGCTGCAGTCACTCCCGCTGACTGAAATCATCCGCCATTACCAGTTGCTCACTGAGG
AGAATATACCTGAAAACCCACTGCGCTTCCTCTATCCCCGAATCCCCCGGGATGAAGCTTTTGGGTGCTA
CTACCAGGAGAAAGTTAATCTCCAGGAACGGAGGAAATACCTGAAACACAGGCTCATTGTGGTCTCTAAT
AGACAGGTGGATGAACTGCAACAACCGCTGGAGCTTAAGCCAGAGCCAGAGCTGGAGTCATTAGAGCTGG
AACTAGGGCTGGTGCCAGAGCCAGAGCTCAGCCTGGACTTAGAGCCACTGCTGAAGGCAGGGCTGGATCT
GGGGCCAGAGCTAGAGTCTGTGCTGGAGTCCACTCTGGAGCCTGTGATAGAGCCCACACTATGCATGGTA
TCACAAACAGTGCCAGAGCCAGACCAAGGACCTGTATCACAGCCAGTGCCAGAGCCAGATTTGCCCTGTG
ATCTGAGACATTTGAACACTGAGCCAATGGAAATCTTCAGAAACTGTGTAAAGATTGAAGAAATCATGCC
GAATGGTGACCCACTGTTGGCTGGCCAGAACACCGTGGATGAGGTTTACGTCTCCCGCCCCAGCCACTTC
TACACTGATGGACCCTTGATGCCTTCTGACTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

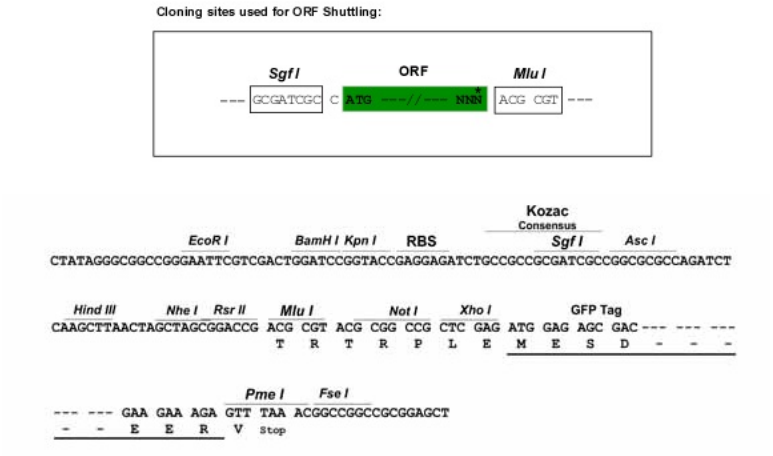
>RG208592 representing NM_005419
Red=Cloning site Green=Tags(s)

MAQWEMLQNLDSPFQDQLHQLYSHSLLPVDIRQYLAVWIEDQNWQEAALGSDDSKATMLFFHFLDQLNYE
CGRCSQDPESLLLQHNLRKFCRDIQPFSQDPTQLAEMIFNLLLEEKRILIQAQRAQLEQGEPVLETPVES
QQHEIESRILDLRAMMEKLVKSISQLKDQQDVFCFRYKIQAKGKTPSLDPHQTKEQKILQETLNELDKRR
KEVLDASKALLGRLTTLIELLLPKLEEWKAQQQKACIRAPIDHGLEQLETWFTAGAKLLFHLRQLLKELK
GLSCLVSYQDDPLTKGVDLRNAQVTELLQRLLHRAFVVETQPCMPQTPHRPLILKTGSKFTVRTRLLVRL
QEGNESLTVEVSIDRNPPQLQGFRKFNILTSNQKTLTPEKGQSQGLIWDFGYLTLVEQRSGGSGKGSNKG
PLGVTEELHIISFTVKYTYQGLKQELKTDTLPVVIISNMNQLSIAWASVLWFNLLSPNLQNQQFFSNPPK
APWSLLGPALSWQFSSYVGRGLNSDQLSMLRNKLFGQNCRTEDPLLSWADFTKRESPPGKLPFWTWLDKI
LELVHDHLKDLWNDGRIMGFVSRSQERRLLKKTMSGTFLLRFSESSEGGITCSWVEHQDDDKVLIYSVQP
YTKEVLQSLPLTEIIRHYQLLTEENIPENPLRFLYPRIPRDEAFGCYYQEKVNLQERRKYLKHRLIVVSN
RQVDELQQPLELKPEPELESLELELGLVPEPELSLDLEPLLKAGLDLGPELESVLESTLEPVIEPTLCMV
SQTVPEPDQGPVSQPVPEPDLPCDLRHLNTEPMEIFRNCVKIEEIMPNGDPLLAGQNTVDEVYVSRPSHF
YTDGPLMPSDF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005419

ORF Size: 2553 bp

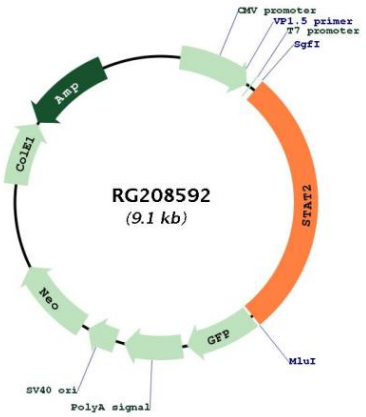
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	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_005419.4
RefSeq Size:	4451 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
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 RG208592