

Product datasheet for **RG233420**

SOCS2 (NM_001270471) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SOCS2 (NM_001270471) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SOCS2
Synonyms: CIS2; Cish2; SOCS-2; SSI-2; SSI2; STAT12
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG233420 representing NM_001270471
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCCTGCGGTGCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGGACCCGGG
GGTCGGCGGAGGAGCCATCCCCGCAGGCGGCGCTCTGGCGAAGGCCCTGCGGGAGCTCGGTGAGACAGG
ATGGTACTGGGAAGTATGACTGTTAATGAAGCCAAAGAGAAATTTAAAGAGGCACCAGAAGGAACCTTC
TTGATTAGAGATAGCTCGCATTGACTACCTACTAACAATATCTGTTAAACATCAGCTGGACCACTA
ATCTTCGAATCGAATACCAAGACGAAAATTCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAA
ACAATTTGACAGTGTGGTTCATCTGATCGACTACTATGTTGAGATGTGCAAGGATAAGCGGACAGGTCCA
GAAGCCCCCGGAACGGCACTGTTACCTTTATCTGACCAAACCGCTCTACACGTGAGCACCATCTCTGC
AGCATCTCTGTAGGCTCACCATTAACAAATGTACCGGTGCCATCTGGGGACTGCCTTTACCAACAAGACT
AAAAGATTACTTGAAGAATATAAATTCAGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG233420 representing NM_001270471
Red=Cloning site Green=Tags(s)

MTLRCLPSGNGGEGTRSQWGTAGSAEPPSPQAARLAKALRELQGTGWYWSMTVNEAKEKLKEAPEGTF
LIRDSSHSYLLTISVKTSAGPTNLRIEYQDGKFRLLDSIICVKSLKQFDSVVHLIDYYVQMCKDKRTGP
EAPRNGTVHLYLTKPLYTSAPSLQHLRLTINKCTGAIWGLPLPTRLKDYLEEYKFQV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

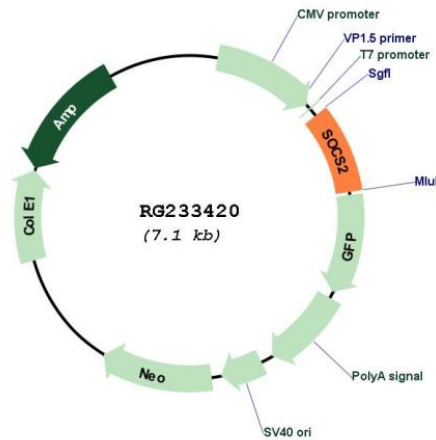


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001270471

ORF Size: 594 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_001270471.2](#)

RefSeq Size: 2541 bp

RefSeq ORF: 597 bp

Locus ID: 8835

UniProt ID: [O14508](#)

Cytogenetics: 12q22

Protein Families: Druggable Genome

Protein Pathways: Insulin signaling pathway, Jak-STAT signaling pathway, Type II diabetes mellitus

Gene Summary: This gene encodes a member of the suppressor of cytokine signaling (SOCS) family. SOCS family members are cytokine-inducible negative regulators of cytokine receptor signaling via the Janus kinase/signal transducer and activation of transcription pathway (the JAK/STAT pathway). SOCS family proteins interact with major molecules of signaling complexes to block further signal transduction, in part, by proteasomal depletion of receptors or signal-transducing proteins via ubiquitination. The expression of this gene can be induced by a subset of cytokines, including erythropoietin, GM-CSF, IL10, interferon (IFN)-gamma and by cytokine receptors such as growth hormone receptor. The protein encoded by this gene interacts with the cytoplasmic domain of insulin-like growth factor-1 receptor (IGF1R) and is thought to be involved in the regulation of IGF1R mediated cell signaling. This gene has pseudogenes on chromosomes 20 and 22. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2012]