

## Product datasheet for RC233420

### SOCS2 (NM\_001270471) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SOCS2 (NM\_001270471) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SOCS2  
**Synonyms:** CIS2; Cish2; SOCS-2; SSI-2; SSI2; STAT12  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC233420 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGACCCTGCGGTGCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGACCCGGG  
 GGTGGCGGAGGAGCCATCCCCGAGCGGCGCTCTGGCGAAGGCCCTGCGGGAGCTCGGTGAGACAGG  
 ATGGTACTGGGAAGTATGACTGTTAATGAAGCCAAAGAGAAATAAAAGAGGCACCAGAAGGAACCTTC  
 TTGATTAGAGATAGCTCGCATTGACTACCTACTAACAATATCTGTTAAACATCAGCTGGACCAACTA  
 ATCTTCGAATCGAATACCAAGACGAAAATTCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAA  
 ACAATTTGACAGTGTGGTTCATCTGATCGACTACTATGTTGAGATGTGCAAGGATAAGCGGACAGGTCCA  
 GAAGCCCCCGGAACGGCACTGTTACCTTTATCTGACCAAACCGCTCTACACGTGAGCACCATCTCTGC  
 AGCATCTCTGTAGGCTCACCATTAACAAATGTACCGGTGCCATCTGGGGACTGCCTTTACCAACAAGACT  
 AAAAGATTACTTGAAGAATATAAATTCAGGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC233420 protein sequence  
 Red=Cloning site Green=Tags(s)

MTLRCLPSGNGGEGTRSQWGTAGSAEESPQAARLAKALRELQGTGWYWSMTVNEAKEKLKEAPEGTF  
 LIRDSSHSYLLTISVKTSAGPTNLRIEYQDGKFRDLSIICVKSCLKQFDSVVHLIDYVYQMKDKRTGP  
 EAPRNGTVHLYLTKPLYTSAPSLQHLRLTINKCTGAIWGLPLPTRLKDYLEEYKFQV

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

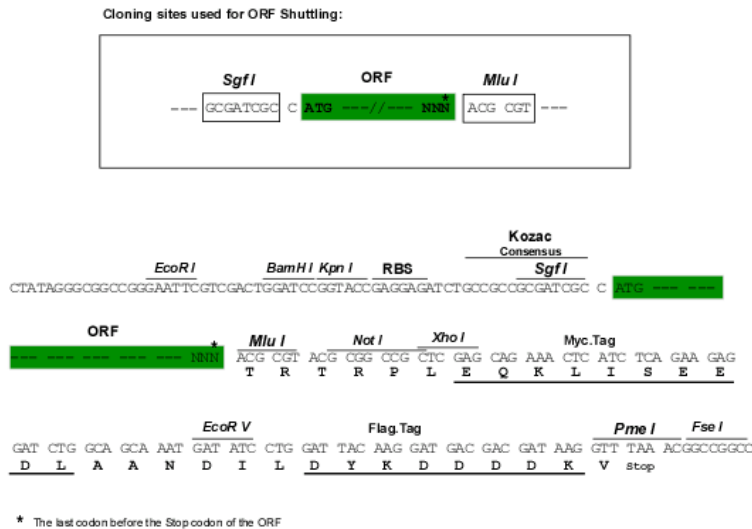


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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6055\\_d04.zip](https://cdn.origene.com/chromatograms/mk6055_d04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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

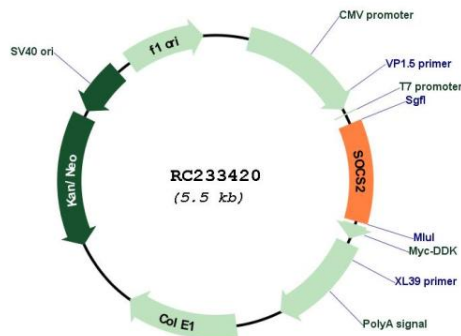
**RefSeq ORF:** 597 bp

**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  
**MW:** 22.2 kDa

**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]

### Product images:



Circular map for RC233420