

Product datasheet for **RG204277**

Oncostatin M (OSM) (NM_020530) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Oncostatin M (OSM) (NM_020530) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Oncostatin M
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG204277 representing NM_020530
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCAAGCATGGCGA
 GCATGGCGGCTATAGGCAGCTGCTCGAAAGAGTACCGCGTGTCTTGGCCAGCTCCAGAAGCAGACAGA
 TCTCATGCAGGACACCAGCAGACTCCTGGACCCCTATATACGTATCCAAGGCCTGGATGTTCTAACTG
 AGAGACTGCAGGGAGCGCCCGGGGCTTCCCGAGTGAGGAGACCTGAGGGGGTGGCAGGCGGG
 GCTTCTGCAGACCCCTCAATGCCACACTGGCTGCGTCTGCACAGACTGGCCGACTTAGAGCAGCGCT
 CCCAAGGCCAGGATTTGGAGAGGTCTGGGCTGAACATCGAGGACTTGGAGAAGCTGCAGATGGCGAGG
 CCGAACATCCTCGGGCTCAGGAACAACATCTACTGCATGGCCAGCTGCTGGACAACCTCAGACACGGCTG
 AGCCACGAAGGCTGGCCGGGGGCTCTCAGCCGCCACCCCAACCCTGCCTCGGATGCTTTTCAGCG
 CAAGCTGGAGGGCTGCAGGTTCTGCATGGCTACCATCGTTCATGCACTCAGTGGGGGGTCTTCAGC
 AAGTGGGGGAGAGCCCGAACCGGAGCCGGAGACACAGCCCCACAGGCCCTGAGGAAGGGGTGCGCA
 GGACCAGACCTCCAGGAAAGGCAAGAGACTCATGACCAGGGGACAGCTGCCCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204277 representing NM_020530
 Red=Cloning site Green=Tags(s)

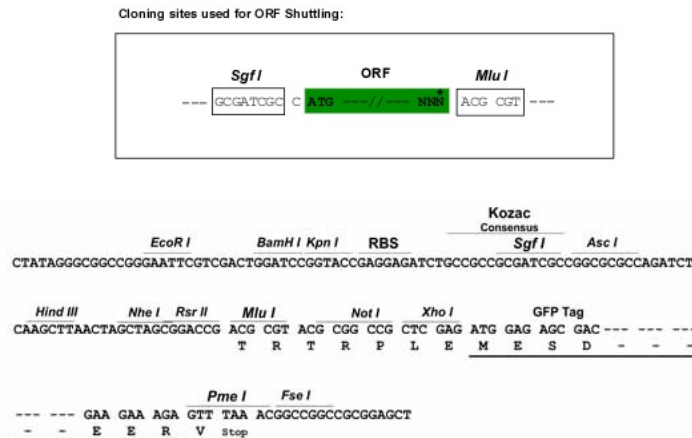
MGVLITQRTLLSLVLALLFSPMASMAAIGSCSKEYRVLLGQLQKQTDLMQDTSRLLDPYIRIQGLDVPKL
 REHCRERPGAFPSEETLRGLGRRGFLQTLNATLGCVLHRLADLEQRLPKAQDLERSGLNIEDLEKLQMAR
 PNILGLRNNIYMAQLLDNSDTAEPTKAGRGASQPPTPTASDAFQRKLEGRFLHGYHRFMHHSVGRVFS
 KWGESPNRSRRHSPHQALRKGVRRTSPSRKGRMLMTRGQLPR

TRTRPLE - GFP Tag - V



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020530

ORF Size: 756 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_020530.6](#)

RefSeq Size: 1880 bp

RefSeq ORF: 759 bp

Locus ID: 5008

UniProt ID: [P13725](#)

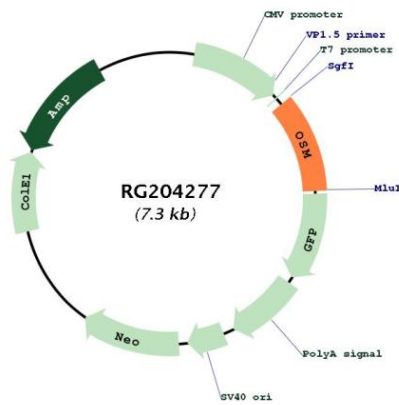
Cytogenetics: 22q12.2

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Stem cell relevant signaling - DSL/Notch pathway, Stem cell relevant signaling - JAK/STAT signaling pathway

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

Gene Summary: This gene encodes a member of the leukemia inhibitory factor/oncostatin-M (LIF/OSM) family of proteins. The encoded preproprotein is proteolytically processed to generate the mature protein. This protein is a secreted cytokine and growth regulator that inhibits the proliferation of a number of tumor cell lines. This protein also regulates the production of other cytokines, including interleukin 6, granulocyte-colony stimulating factor and granulocyte-macrophage colony stimulating factor in endothelial cells. This gene and the related gene, leukemia inhibitory factor, also present on chromosome 22, may have resulted from the duplication of a common ancestral gene. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RG204277