

Product datasheet for RC204877

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GRO beta (CXCL2) (NM_002089) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GRO beta (CXCL2) (NM_002089) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:GRO beta

Synonyms: CINC-2a; GRO2; GROb; MGSA-b; MIP-2a; MIP2A; SCYB2

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC204877 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCCCGCGCCACGCTCTCCGCCGCCCCCAGCAATCCCCGGCTCCTGCGGGTGGCGCTGCTGCTCCTGC
TCCTGGTGGCCGCCAGCCGGCGCAGCAGGAGCGCCCCTGGCCACTGAACTGCGCTGCCAGTGCTTGCA
GACCCTGCAGGGAATTCACCTCAAGAACATCCAAAGTGTGAAGGTGAAGTCCCCCGGACCCCACTGCGCC
CAAACCGAAGTCATAGCCACACCTCAAGAATGGGCAGAAAGCTTGTCTCAACCCCGCATCGCCCATGGTTA

AGAAAATCATCGAAAAGATGCTGAAAAATGGCAAATCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204877 protein sequence

Red=Cloning site Green=Tags(s)

MARATLSAAPSNPRLLRVALLLLLLVAASRRAAGAPLATELRCQCLQTLQGIHLKNIQSVKVKSPGPHCA

QTEVIATLKNGQKACLNPASPMVKKIIEKMLKNGKSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6062 h01.zip

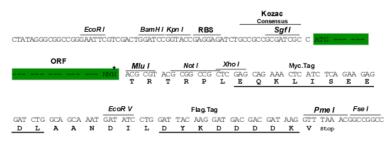
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002089

ORF Size: 321 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: <u>NM 002089.4</u>

RefSeq Size: 1234 bp
RefSeq ORF: 324 bp
Locus ID: 2920



UniProt ID: P19875

Cytogenetics: 4q13.3

Domains: IL8

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Chemokine signaling pathway, Cytokine-cytokine receptor interaction, NOD-like receptor

signaling pathway

MW: 11.4 kDa

Gene Summary: This antimicrobial gene is part of a chemokine superfamily that encodes secreted proteins

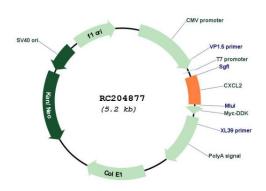
involved in immunoregulatory and inflammatory processes. The superfamily is divided into four subfamilies based on the arrangement of the N-terminal cysteine residues of the mature

peptide. This chemokine, a member of the CXC subfamily, is expressed at sites of

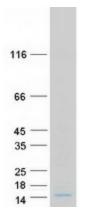
inflammation and may suppress hematopoietic progenitor cell proliferation. [provided by

RefSeq, Sep 2014]

Product images:



Circular map for RC204877



Coomassie blue staining of purified CXCL2 protein (Cat# [TP304877]). The protein was produced from HEK293T cells transfected with CXCL2 cDNA clone (Cat# RC204877) using MegaTran 2.0 (Cat# [TT210002]).