

Product datasheet for **SC322326**

GRO alpha (CXCL1) (NM_001511) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: GRO alpha (CXCL1) (NM_001511) Human Untagged Clone
Tag: Tag Free
Symbol: GRO alpha
Synonyms: FSP; GRO1; GROa; MGSA; MGSA-a; NAP-3; SCYB1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for SC322326
 GCCGCAGGCACCTCCTCGCCAGCTCTTCCGCTCCTCTCACAGCCGCCAGACCCGCTGCT
 GAGCCCCATGGCCCGCGTGTCTCTCCGCCGCCCCAGCAATCCCCGGCTCCTGCGAGT
 GGCAGTGTGCTCCTGCTCCTGGTAGCCGCTGGCCGGCGCGCAGCAGGAGCGTCCGTGGC
 CACTGAACTGCGCTGCCAGTGCTTGCGAGCCCTGCAGGGAATTCACCCCAAGAACATCCA
 AAGTGTGAACGTGAAGTCCCCGGACCCCACTGCGCCCAAACCGAAGTCATAGCCCACT
 CAAGAATGGGCGGAAAGCTTGCCTCAATCCTGCATCCCCATAGTTAAGAAAATCATCGA
 AAAGATGCTGAACAGTGACAAATCCAACAGACCAGAAGGGAGGAGGAAGCTCACTGGTGG
 CTGTTCTGAAGGAGGCCCTGCCCTTATAGGAACAGAAGAGGAAAGAGACACAGCTGC
 AGAGGCCACCTGGATTGTGCTAATGTGTTTGAGCATCGCTTAGGAGAAGTCTTCTATTT
 ATTTATTTATTCATTAGTTTTGAAGATTCTATGTTAATATTTAGGTGTAATAAATTA
 GGGTATGATTAACCTACCTGCACACTGCCTATTATATTCATTCTTTTTGAAATGTCAA
 CCCCAAGTTAGTTCAATCTGATTTCATATTTAATTTGAAGGTAGAATGTTTTCAAATGTT
 CTCCAGTCATTATGTTAATATTTCTGAGGAGCCTGCAACATGCCAGCCACTGTGATAGAG
 GCTGGCGGATCCAAGCAAATGGCCAATGAGATCATTGTGAAGGCAGGGGAATGTATGTGC
 ACATCTGTTTTGTAAGTGTGTTAGATGAATGTCAGTTGTTATTTATTGAAATGATTTACA
 GTGTGTGGTCAACATTTCTCATGTTGAACTTTAAGAATAAAATGTTCTAAATATCCCT
 TGGACATTTTATGTCTTTCTGTAAGGCATACTGCCTTGTGTTAATGGTAGTTTTACAGTG
 TTTCTGGCTTAGAACAAAGGGGCTTAATTATTGATGTTTTTCATAGAGAATATAAAAATAA
 AGCCCTTATAGAAAAA

Restriction Sites: Please inquire

ACCN: NM_001511



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001511.1](#), [NP_001502.1](#)

RefSeq Size: 1103 bp

RefSeq ORF: 324 bp

Locus ID: 2919

UniProt ID: [P09341](#)

Cytogenetics: 4q13.3

Domains: IL8

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Epithelial cell signaling in Helicobacter pylori infection, NOD-like receptor signaling pathway

Gene Summary:

This antimicrobial gene encodes a member of the CXC subfamily of chemokines. The encoded protein is a secreted growth factor that signals through the G-protein coupled receptor, CXC receptor 2. This protein plays a role in inflammation and as a chemoattractant for neutrophils. Aberrant expression of this protein is associated with the growth and progression of certain tumors. A naturally occurring processed form of this protein has increased chemotactic activity. Alternate splicing results in coding and non-coding variants of this gene. A pseudogene of this gene is found on chromosome 4. [provided by RefSeq, Sep 2014]

Transcript Variant: This variant (1) encodes the functional protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.