

C-X-C motif chemokine 1 (CXCL1), Human

Cat.no. PK0310

Product size: 5ug 25ug 1mg

Source: E. coli

Species: Human

Biological Activity: The EC50 value of human GRO alpha/CXCL1 on Ca²⁺ mobilization assay in CHO-K1/Gα15/hCXCR2 cells (human Gα15 and human CXCR2 stably expressed in CHO-K1 cells) is less than 100ng/ml.

Molecular Weight: 7.8 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% by SDS-PAGE analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Human CXCL1 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human CXCL1 should be stable up to 1 week at 4°C or up to 3 months at -20°C.

Description: Chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family that was previously called GRO1 oncogene, GRO-α, KC, neutrophil-activating protein 3 (NAP-3) and melanoma growth stimulating activity, alpha (MSGA-α). Human GRO-α, GRO-β (MIP2α), and GRO-γ (MIP2β) are products of three distinct, nonallelic human genes. GRO-β and GRO-γ share 90% and 86% amino acid sequence homology with GROα, respectively. All three isoforms of GRO are CXC chemokines that can signal through the CXCR1 or CXCR2 receptors. GRO expression is inducible by serum or PDGF and/or by a variety of inflammatory mediators, such as IL-1 and TNF, in monocytes, fibroblasts, melanocytes and epithelial cells. In certain tumor cell lines, GRO is expressed constitutively. Similar to other alpha chemokines, the three GRO proteins are potent neutrophil attractants and activators. Additionally, these chemokines are also active toward basophils. All three GROs can bind with high affinity to the IL-8 receptor type B. Recombinant Human CXCL1 produced in E.coli is a single non-glycosylated polypeptide chain containing 73 amino acids.

Amino Acid Sequence:

Ala35-Asn107 (Accession #:P09341)

Synonyms: CXCL1, GRO, GRO1, GROA, MGSA, SCYB1, Growth-regulated alpha protein, C-X-C motif chemokine 1, GRO-alpha, Melanoma growth stimulatory activity, MGSA, Neutrophil-activating protein 3, NAP-3, NAP3, GRO-α, GROα

Note: For research use only, not for use in diagnostic procedure.