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Datasheet for ABIN1096467
CXCL2 Protein (AA 39-107)

Overview

Quantity:	50 µg
Target:	CXCL2
Protein Characteristics:	AA 39-107
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human C-X-C Motif Chemokine 2/CXCL2
Sequence:	MTELRCQLQ TLQGIHLKNI QSVKVKSPGP HCAQTEVIAT LKNGQKACLN PASPMVKKII EKMLKNGKSN
Characteristics:	Recombinant Human C-X-C Motif Chemokine 2/CXCL2 is produced with our E. coli expression system. The target protein is expressed with sequence (Thr39-Asn107) of Human CXCL2.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	CXCL2
Alternative Name:	mip-2 (CXCL2 Products)

Target Details

Background: Chemokine (C-X-C Motif) Ligand 2 (CXCL2) is a small secreted cytokine which belongs to the CXC chemokine family. CXCL2 is 90% identical in amino acid sequence as a related chemokine, CXCL1. CXCL2/MIP2-alpha is secreted by monocytes and macrophages and is chemotactic for polymorphonuclear leukocytes and hematopoietic stem cells. The gene for CXCL2 is located on human chromosome 4 in a cluster of other CXC chemokines. CXCL2 mobilizes cells by interacting with a cell surface chemokine receptor called CXCR2. CXCL2/MIP2-alpha has been known to regulate immune functions mainly by chemo-attracting neutrophils. It is produced by activated monocytes and neutrophils and expressed at sites of inflammation. CXCL2 is a hemoregulatory chemokine, which suppresses hematopoietic progenitor cell proliferation. CXCL2 can be induced by receptor activator of NF-kappaB ligand, the osteoclast (OC) differentiation factor, through JNK and NF-kappaB signaling pathways in OC precursor cells. CXCL2 in turn enhanced the proliferation of OC precursor cells of bone marrow-derived macrophages (BMMs) through the activation of ERK. Knockdown of CXCL2 inhibited both the proliferation of and the ERK activation in BMMs. During osteoclastogenesis CXCL2 stimulated the adhesion and the migration of BMMs. CXCL2 is a novel therapeutic target for inflammatory bone destructive diseases.

Alternative Names: C-X-C Motif Chemokine 2, Growth-Regulated Protein Beta, Gro-Beta, Macrophage Inflammatory Protein 2-Alpha, MIP2-Alpha, CXCL2, GRO2, GROB, MIP2A, SCYB2

Molecular Weight: 7.67 kDa

UniProt: [P19875](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: It is not recommended to reconstitute to a concentration less than 100 µg/mL.
Dissolve the lyophilized protein in ddH₂O.
Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM TrisHCl, 400 mM NaCl, pH 8.5.

Handling Advice: Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

Handling

Storage: 4 °C/-20 °C/-80 °C

Storage Comment: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.
Reconstituted protein solution can be stored at 4-7°C for 2-7 days.
Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date: 3 months