

32-7081: Recombinant Human C-X-C Motif Chemokine 2/CXCL2

Gene : CXCL2
Gene ID : 2920
Uniprot ID : P19875

Description

Source: E.coli.
MW :7.67kD.

Recombinant Human C-X-C Motif Chemokine 2 is produced by our E.coli expression system and the target gene encoding Thr39-Asn107 is expressed. 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 hematoregulatory 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.

Product Info

Amount : 10 µg / 50 µg
Content : Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl, 400mM NaCl, pH 8.5.
Storage condition : 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.
Amino Acid : MTELRCQCLQTLQGIHLKNIQSVKVKSPGPHCAQTEVIATLKNQKACLNPASPMVKKIIKMLKNGKSN

Application Note

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

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.