



Recombinant Mouse PF-4 (CXCL4)

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	M10-230S
Size:	5 µg
Lot. No.:	According to product label

Sequence

VTSAGPEESD GDLSCVCVKT ISSGIHLKHI TSLEVIKAGR
HCAVPQLIAT LKNGRKICLD RQAPLYKKVI KKILES

Database References

Protein RefSeq:	NP_064316.1
Uniprot ID:	Q9Z126
mRNA RefSeq:	NM_019932.4

Scientific Background

Gene-ID (NCBI):	56744
Synonyms:	Pf4; Cxcl4; Scyb4

PF4 or CXCL4 is a member of the CXC chemokine family. Mouse CXCL4 is a 105 amino acid (aa) protein with a 29 aa signal sequence and a 76 aa mature protein. CXCL4 has homology with IL8 and β -thromboglobulin. Mouse and human CXCL4 share a 64% identity. Mouse and rat CXCL4 share 89% identity. CXCL4 contains several heparin-binding sites at the C-terminal region. The active protein consists of a tetramer composed of individual CXCL4 subunits. Megakaryocytes synthesize CXCL4 and store it as tetramers in α -granules. The CXCL4 tetramers are secreted by activated platelets and can be measured at micromolar levels in serum. In contrast to other CXC chemokines, CXCL4 lacks chemotactic activity for polymorphonuclear granulocytes. CXCL4 does not contain an ELR motif. However, many other functions have been observed for CXCL4. CXCL4 is involved in monocyte survival and differentiation into macrophages, and it has antiangiogenic activity. CXCL4 has been demonstrated to inhibit the binding of FGF2 to high-affinity receptors and its subsequent internalization. Cell surface neutrophil chondroitin sulfate chains serve as CXCL4 binding sites; affinity is controlled by the degree of sulfation of these chains.

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	76
MW:	8.2 kDa

Biological Activity: Determined by its ability to chemoattract human neutrophils using a concentration range of 10.0-100.0 ng/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!