

## Pf4

### Recombinant Mouse Platelet Factor 4

<b>Catalog No.</b>	CS279A CS279B CS279C	<b>Quantity:</b>	5 µg 20 µg 1 mg
<b>Alternate Names:</b>	PF-4, Cxcl4, Scyb4, C-X-C motif chemokine 4		
<b>Description:</b>	Platelet Factor 4 (CXCL4), is a member of the CXC chemokine family. CXCL4 has homology with IL8 and β-thromboglobulin. 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, 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 the chains.		
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.		
<b>Gene ID:</b>	56744		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	Approximately 8.2 kDa, a single non-glycosylated polypeptide chain containing 76 amino acids.		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered solution in 20 mM PB + 1.5 M NaCl, pH 7.4.		
<b>Purity:</b>	>97% by SDS-PAGE and HPLC analyses.		
<b>Endotoxin Level:</b>	Less than 1 EU/µg of rMuPF-4/CXCL4 as determined by LAL method.		
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> determined by inhibiting human FGFbasic-dependent proliferation of mouse NR6R/3T3 cells is less than 15000 ng/ml, corresponding to a specific activity of >66.7 IU/mg.		
<b>Amino Acid Sequence:</b>	VTSAGPEESD GDLSCVCVKT ISSGIHLKHI TSLEVIKAGR CAVPQLIAT LKNGRKICLD RQAPLYKKVI KKILES		
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.		
<b>Storage &amp; Stability:</b>	This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. <b>Avoid repeated freeze/thaw cycles.</b>		

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