

# Recombinant Human, CXCL4 / C-X-C Motif Chemokine Ligand 4,

# **Animal Free & Carrier Free**

Cat #: C-CYP377 Size: 5µg, 20µg, 100µg, 500µg, 1mg Shipping: Blue Ice

### **Product Overview**

CXCL4, also known as platelet factor 4 (PF-4), is one of the most plentiful platelet chemokines. Depending on the cell type, CSCL4 may has several biological functions. CXCL4 is mainly produced in megakaryocytes, released from the  $\alpha$ -granules of platelets as a tetramer at micromolar concentrations depending on platelet activation. CXCL4 has both procoagulant and anticoagulant activities, thereby can bind heparin and neutralize the anticoagulant effect of heparin. In addition, CXCL4 also have functions such as inhibiting factor XII, and vitamin K dependent coagulation factor, and stimulating activated protein C generation. As a strong tumor inhibitor, CXCL4 can inhibit endothelial cell migration, proliferation, and in vivo angiogenesis through interfering with the angiogenic effect of growth factors such as FGF and VEGF.

# **Product Information**

Source: Escherichia Coli.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

**Biological Activity:** Measure by its ability to inhibit human FGF-2- induce proliferation in HUVEC cells. The ED50 for this effect is <5  $\mu$ g/mL.

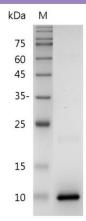
**Endotoxin:** <0.1EU per  $1\mu g$  of the protein by the LAL method.

**Amino acid sequence:** <u>EAEEDGDLQCLCVKTTSQVRPRHITSLEVIKAGPHCPTAQLIATLKNGRKICLDLQAPLYKKIIKKLLES</u> with polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.







SDS-PAGE analysis of recombinant human CXCL4

## **Usage Method**

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10  $\mu$ g/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

### Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

### Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.

