

## Datasheet for ABIN1672782

### PF4 ELISA Kit

#### 1 Image

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#### Overview

Quantity:	96 tests
Target:	PF4
Binding Specificity:	AA 30-105
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

#### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CXCL4/PF4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: V30-S105
Specificity:	Expression system for standard: E.coli Immunogen sequence: V30-S105
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<1pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

Target:	PF4
Alternative Name:	CXCL4 ( <a href="#">PF4 Products</a> )
Background:	<p>Protein Function: Released during platelet aggregation. Neutralizes the anticoagulant effect of heparin because it binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Chemotactic for neutrophils and monocytes. Inhibits endothelial cell proliferation (By similarity). .</p> <p>Background: Platelet factor 4(PF4) is a small cytokine belonging to the CXC chemokine family that is also known as chemokine(C-X-C motif) ligand 4(CXCL4). The PF4 gene was localized on map to 4q12-q13. Chemokines play fundamental roles in the development, homeostasis, and function of the immune system, and they have effects on cells of the central nervous system as well as on endothelial cells involved in angiogenesis or angiostasis. Platelet factor-4 is a 70-amino acid protein that is released from the alpha-granules of activated platelets and binds with high affinity to heparin. Its major physiologic role appears to be neutralization of heparin-like molecules on the endothelial surface of blood vessels, thereby inhibiting local antithrombin III activity and promoting coagulation. As a strong chemoattractant for neutrophils and fibroblasts, PF4 probably has a role in inflammation and wound repair.</p> <p>Synonyms: Platelet factor 4,PF-4,C-X-C motif chemokine 4,Pf4,Cxcl4, Scyb4,</p> <p>Full Gene Name: Platelet factor 4</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	56744
UniProt:	<a href="#">Q9Z126</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated

## Application Details

**Protocol:** mouse CXCL4 ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CXCL4 has been precoated onto 96-well plates. Standards(E.coli, V30-S105) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL4 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB are used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse CXCL4 amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL mouse CXCL4 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CXCL4 standard solution and each sample be measured in duplicate.

**Assay Precision:**

- Sample 1: n=16, Mean(pg/ml): 84.2, Standard deviation: 4.97, CV(%): 5.9
- Sample 2: n=16, Mean(pg/ml): 266, Standard deviation: 16.49, CV(%): 6.2
- Sample 3: n=16, Mean(pg/ml): 524, Standard deviation: 25.2, CV(%): 4.8,
- Sample 1: n=24, Mean(pg/ml): 92.1, Standard deviation: 6.63, CV(%): 7.2
- Sample 2: n=24, Mean(pg/ml): 285, Standard deviation: 21.09, CV(%): 7.4
- Sample 3: n=24, Mean(pg/ml): 519, Standard deviation: 31.7, CV(%): 6.1

**Restrictions:** For Research Use only

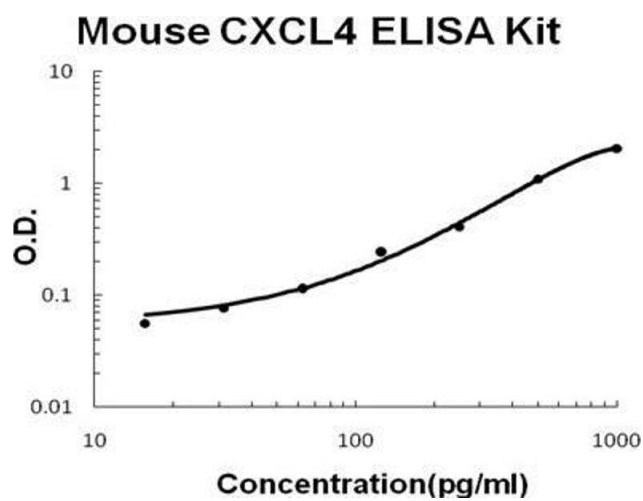
## Handling

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C,4 °C

**Storage Comment:** Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

**Expiry Date:** 12 months



**ELISA**

**Image 1.** Mouse CXCL4/PF4 PicoKine ELISA Kit standard curve