

# **Anti-CXCR1 Antibody**

Catalog Number: PA2080

### **About CXCR1**

CXCR1 (Chemokine, CXC Motif, Receptor 1), also known as IL8RA or IL8R1, is a chemokine receptor. IL8RA is its human gene. Morris et al. (1992) mapped the IL8RA gene to chromosome 2q35. Hartl et al. (2007) concluded that CXCR1 cleavage and its functional consequences represent an important pathophysiologic mechanism in CF and other neutrophilic airway diseases. Receptor to interleukin-8, which is a powerful neutrophils chemotactic factor. Binding of IL-8 to the receptor causes activation of neutrophils. This response is mediated via a G-protein that activate a phosphatidylinositol-calcium second messenger system. This receptor binds to IL-8 with a high affinity and to MGSA (GRO) with a low affinity.

#### Overview

Product Name	Anti-CXCR1 Antibody
Reactive Species	Human
Description	Boster Bio Anti-CXCR1 Antibody catalog # PA2080. Tested in Flow Cytometry, WB applications. This antibody reacts with Human.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P25024

## **Technical Details**

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human CXCR1.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.



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Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.  If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.  Some PubMed article(s) citing the expression level of this target are as follows:  Boster Bio's internal QC testing used:  Western blot, 0.1-0.5ug/ml, Human  Flow Cytometry, 1-3 ug/1x10 <sup>6</sup> cells, Human



## Anti-CXCR1 Antibody (PA2080) Images

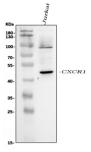


Figure 1. Western blot analysis of CXCR1 using anti-CXCR1 antibody (PA2080).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CXCR1 antigen affinity purified polyclonal antibody (Catalog # PA2080) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CXCR1 at approximately 50 kDa. The expected band size for CXCR1 is at 40 kDa.

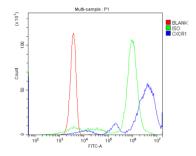


Figure 2. Flow Cytometry analysis of human PBMC cells using anti-CXCR1 antibody (PA2080). Overlay histogram showing human PBMC cells stained with PA2080 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CXCR1 Antibody (PA2080, 1 ug/1x10 $^6$  cells) for 30 min at 20 $^\circ$ C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10 $^6$  cells) was used as secondary antibody for 30 minutes at 20 $^\circ$ C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10 $^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

# 2 Publications Citing This Product

- 1. PubMed ID: 30086759, IL-8/CXCR1/2 signalling promotes tumor cell proliferation, invasion and vascular mimicry in glioblastoma
- 2. PubMed ID: 28610419, Gene Expression Profiling of Chemokines and Their Receptors in Low and High Grade Astrocytoma

Visit <u>bosterbio.com/anti-cxcr1-antibody-pa2080-boster.html</u> to see all 2 publications.

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