

Anti-CXCR2 Antibody Picoband®

Catalog Number: A00455-2

About CXCR2

CXCR2 is a receptor for Interleukin 8, which is a powerful neutrophil chemotactic factor. It is a member of the GPCR family (subfamily, chemokine). Binding of IL8 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 IL8 with a high affinity and to GRO/MGSA and NAP2 also with a high affinity. It has been reported to be expressed in a wide variety of tissues. ESTs have been isolated from human placenta and thymus libraries.

Submit a product review to Biocompare.com

[Submit a review of this product](#) to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Overview

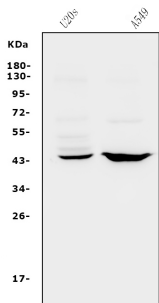
Product Name	Anti-CXCR2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-CXCR2 Antibody Picoband® catalog # A00455-2. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
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	P25025

Technical Details

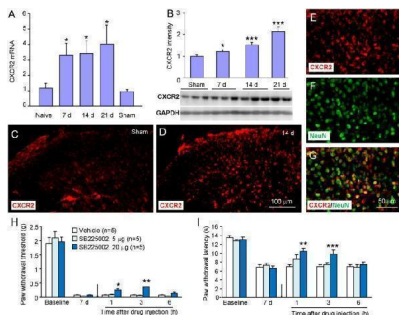
Immunogen	E.coli-derived human CXCR2 recombinant protein (Position: F32-I54;A177-R212).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).

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.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10⁶ cells, Human ELISA, 0.1-0.5ug/ml, - Note: For flow cytometry (FCM), validated for fixed cells only. Not validated for FACS or surface flow cytometry using live cells.

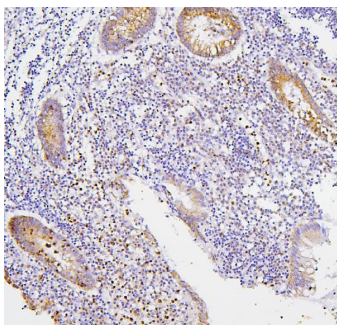
Anti-CXCR2 Antibody Picoband® (A00455-2) Images



Western blot analysis of CXCR2 using anti-CXCR2 antibody (A00455-2). 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 30ug of sample under reducing conditions. Lane 1: human U20S whole cell lysates, Lane 2: human A549 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-CXCR2 antigen affinity purified polyclonal antibody (Catalog # A00455-2) 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 CXCR2 at approximately 41KD. The expected band size for CXCR2 is at 41KD.

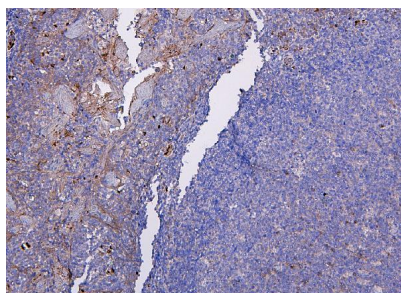


RM-1 cell inoculation increases CXCR2 mRNA and protein expression in the spinal cord. (A) Real-time PCR results show the increase of CXCR2 mRNA expression in the spinal cord. CXCR2 mRNA was increased from 7 days to 21 days after inoculation. *P < 0.05 vs . sham. n = 4 mice per group. (B) Western blot shows time course of CXCR2 protein expression in the spinal cord after inoculation (B) . n = 3 mice per group. (C, D) Immunostaining shows the CXCR2 expression in the spinal cord in sham (C) and inoculated (D) animals. CXCR2-IR was increased at 7 days after inoculation. (E-G) Double staining shows CXCR2 was colocalized with neuronal marker NeuN. H , I . SB2205002 attenuated RM-1 cell inoculation-induced mechanical allodynia (H) and heat hyperalgesia (I) . * P < 0.05; ** P < 0.01; *** P < 0.001 vs . vehicle. Index in PubMed under a CC BY license. PMID: 24580964

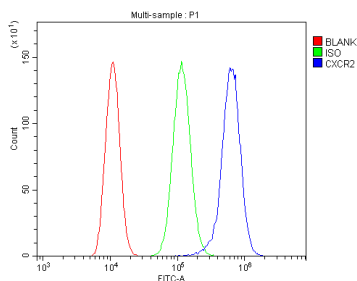


IHC analysis of CXCR2 using anti-CXCR2 antibody (A00455-2). CXCR2 was detected in paraffin-embedded section of human appendicitis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-CXCR2 Antibody (A00455-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

IHC analysis of CXCR2 using anti-CXCR2 antibody (A00455-2). CXCR2 was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen



retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-CXCR2 Antibody (A00455-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



Flow Cytometry analysis of THP-1 cells using anti-CXCR2 antibody (A00455-2). Overlay histogram showing THP-1 cells stained with A00455-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CXCR2 Antibody (A00455-2, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

3 Publications Citing This Product

1. PubMed ID: , Connexin-43 induces chemokine release from spinal cord astrocytes to maintain late-phase neuropathic pain in mice
2. PubMed ID: 30404567, Cui D,Zhao Y,Xu J.Activation of CXCL5-CXCR2 axis promotes proliferation and accelerates G1 to S phase transition of papillary thyroid carcinoma cells and activates JNK and p38 pathways.Cancer Biol Ther.2019;20(5):608-616.doi:10.1080/15384047.2018.1539289.Epub 2018 Nov 7.PMID:30404567;PMCID:PMC6606038.
3. PubMed ID: 30404567, Activation of CXCL5-CXCR2 axis promotes proliferation and accelerates G1 to S phase transition of papillary thyroid carcinoma cells and activates JNK and p38 pathways Dong Cui 1, Yongfu Zhao 1, Jingchao Xu 1 Cancer Biol Ther. 2019;20(5):608-616. doi:

Visit bosterbio.com/anti-cxcr2-picoband-trade-antibody-a00455-2-boster.html to see all 3 publications.

Anti-CXCR2 Antibody

For Research Use Only. Not for use in diagnostic procedures.