

Anti-CCR5 Picoband® Antibody

Catalog Number: A00061-2

About CCR5

C-C chemokine receptor type 5, also known as CCR5 or CD195, is a protein on the surface of white blood cells that is involved in the immune system as it acts as a receptor for chemokines. It is mapped to 3p21.31. This gene encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. This protein is expressed by T cells and macrophages, and is known to be an important co-receptor for macrophage-tropic virus, including HIV, to enter host cells. Defective alleles of this gene have been associated with the HIV infection resistance. The ligands of this receptor include monocyte chemoattractant protein 2 (MCP-2), macrophage inflammatory protein 1 alpha (MIP-1 alpha), macrophage inflammatory protein 1 beta (MIP-1 beta) and regulated on activation normal T expressed and secreted protein (RANTES). Expression of this gene was also detected in a promyeloblastic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation. This gene is located at the chemokine receptor gene cluster region. An allelic polymorphism in this gene results in both functional and non-functional alleles; the reference genome represents the functional allele. Two transcript variants encoding the same protein have been found for this gene.

Overview

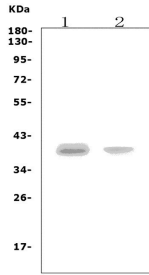
Product Name	Anti-CCR5 Picoband® Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CCR5 Picoband® Antibody catalog # A00061-2. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior 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, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	P51681

Technical Details

Immunogen	E.coli-derived human CCR5 recombinant protein (Position: Q21-K322).
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.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5ug/ml, Mouse, Rat ELISA, 0.1-0.5ug/ml, -

Anti-CCR5 Picoband® Antibody (A00061-2) Images



Western blot analysis of CCR5 using anti-CCR5 antibody (A00061-2). 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 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates, Lane 2: mouse spleen tissue 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-CCR5 antigen affinity purified polyclonal antibody (Catalog # A00061-2) 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 CCR5 at approximately 40KD. The expected band size for CCR5 is at 40KD.

3 Publications Citing This Product

1. PubMed ID: 10.1016/j.transproceed.2006.10.193, Blocking the CC Chemokine Receptor 5 Pathway by Antisense Peptide Nucleic Acid Prolongs Islet Allograft Survival
2. PubMed ID: 10.1016/j.brainresbull.2017.10.009, Chemokine CCL8 and its receptor CCR5 in the spinal cord are involved in visceral pain induced by experimental colitis in mice
3. PubMed ID: 23498802, Zhao H, Zhang Y, Song G, Zhao W, Bai X, Zhang J, Zhao X. Transplant Proc. 2013 Mar;45(2):635-8. Doi: 10.1016/J.Transproceed.2012.03.065. The Significance For Chronic Rejection Of Cardiac Allograft Of Regulated Upon Activation Normal T-Cell Cytokin...

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Anti-CCR5 Antibody

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