

Anti-CXCL14 Picoband Antibody

Catalog # ABO13009

Specification

Anti-CXCL14 Picoband Antibody - Product Information

Application WB, IHC
Primary Accession O95715
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for CXCL14 detection. Tested with WB, IHC-P, Direct ELISA in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CXCL14 Picoband Antibody - Additional Information

Gene ID 9547

Other Names

C-X-C motif chemokine 14, Chemokine BRAK, MIP-2G, Small-inducible cytokine B14, CXCL14, MIP2G, NJAC, SCYB14

Application Details

Western blot, 0.1-0.5 μ g/ml
br>
lmmunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml
br>
Direct ELISA, 0.1-0.5 μ g/ml
br>

Subcellular Localization

Secreted.

Tissue Specificity

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Highly expressed in normal tissue without inflammatory stimuli and infrequently expressed in cancer cell lines. Weakly expressed in monocyte- derived dendritic cells. Not detected in lung or unstimulated peripheral blood lymphocytes.

Contents

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E. coli-derived human CXCL14 recombinant protein (Position: S35-E111).

Cross Reactivity

No cross reactivity with other proteins.



Storage

At -20°C; for one year. After r°Constitution, at 4°C; for one month. It°Can also be aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and thawing.

Anti-CXCL14 Picoband Antibody - Protein Information

Name CXCL14

Synonyms MIP2G, NJAC, SCYB14

Function

Potent chemoattractant for neutrophils, and weaker for dendritic cells. Not chemotactic for T-cells, B-cells, monocytes, natural killer cells or granulocytes. Does not inhibit proliferation of myeloid progenitors in colony formation assays.

Cellular Location

Secreted.

Tissue Location

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Highly expressed in normal tissue without inflammatory stimuli and infrequently expressed in cancer cell lines. Weakly expressed in monocyte-derived dendritic cells. Not detected in lung or unstimulated peripheral blood lymphocytes

Anti-CXCL14 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CXCL14 Picoband Antibody - Images





Figure 1. Western blot analysis of CXCL14 using anti-CXCL14 antibody (ABO13009). 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: human SW620 cell lysates, Lane 2: human HepG2 cell lysates, Lane 3: human Hela cell lysates, Lane 4: rat brain tissue lysates,Lane 5: mouse skeletal muscle 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-CXCL14 antigen affinity purified polyclonal antibody (Catalog # ABO13009) at 0.5 $\hat{l}\frac{1}{4}$ g/mL overnight at 4 \hat{A} °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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CXCL14 at approximately 13KD. The expected band size for CXCL14 is at 13KD.

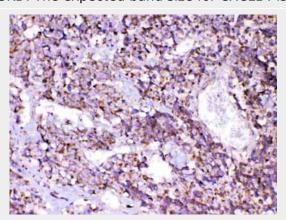


Figure 2. IHC analysis of CXCL14 using anti-CXCL14 antibody (ABO13009).CXCL14 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1^{1} /4g/ml rabbit anti-CXCL14 Antibody (ABO13009) 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 Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



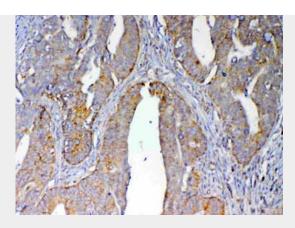


Figure 3. IHC analysis of CXCL14 using anti-CXCL14 antibody (ABO13009).CXCL14 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with $11^1/4$ g/ml rabbit anti-CXCL14 Antibody (ABO13009) overnight at 44° C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 374° C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Figure 4. IHC analysis of CXCL14 using anti-CXCL14 antibody (ABO13009).CXCL14 was detected in paraffin-embedded section of mouse cardiac muscle tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with $1\hat{l}\frac{1}{4}$ g/ml rabbit anti-CXCL14 Antibody (ABO13009) overnight at $4\hat{A}^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at $37\hat{A}^{\circ}$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

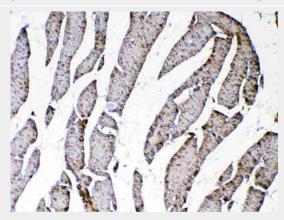


Figure 5. IHC analysis of CXCL14 using anti-CXCL14 antibody (ABO13009).CXCL14 was detected





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in paraffin-embedded section of rat cardiac muscle tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 111/4g/ml rabbit anti-CXCL14 Antibody (ABO13009) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-CXCL14 Picoband Antibody - Background

Chemokine (C-X-C motif) ligand 14 (CXCL14) is a small cytokine belonging to the CXC chemokine family that is also known as BRAK (for breast and kidney-expressed chemokine). The gene for CXCL14 is located on chromosome 5 in humans. The protein encoded by this gene is structurally related to the CXC (Cys-X-Cys) subfamily of cytokines. Members of this subfamily are characterized by two cysteines separated by a single amino acid. This cytokine displays chemotactic activity for monocytes but not for lymphocytes, dendritic cells, neutrophils or macrophages. It has been implicated that this cytokine is involved in the homeostasis of monocyte-derived macrophages rather than in inflammation.