

## Anti-DC-SIGN/CD209 Antibody Picoband®

Catalog Number: A01025-2

### About CD209

DC-SIGN (Dendritic Cell-Specific Intercellular adhesion molecule-3-Grabbing Non-integrin) also known as CD209 (Cluster of Differentiation 209) is a protein which in humans is encoded by the CD209 gene. This gene encodes a transmembrane receptor and is often referred to as DC-SIGN because of its expression on the surface of dendritic cells and macrophages. The encoded protein is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens ranging from parasites to viruses with a large impact on public health. The protein is organized into three distinct domains: an N-terminal transmembrane domain, a tandem-repeat neck domain and C-type lectin carbohydrate recognition domain. The extracellular region consisting of the C-type lectin and neck domains has a dual function as a pathogen recognition receptor and a cell adhesion receptor by binding carbohydrate ligands on the surface of microbes and endogenous cells. The neck region is important for homo-oligomerization which allows the receptor to bind multivalent ligands with high avidity. Variations in the number of 23 amino acid repeats in the neck domain of this protein are rare but have a significant impact on ligand binding ability. This gene is closely related in terms of both sequence and function to a neighboring gene. DC-SIGN and L-SIGN differ in their ligand-binding properties and distribution. Alternative splicing results in multiple variants.

### Overview

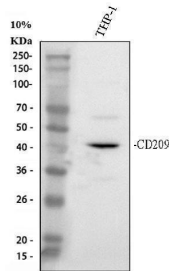
Product Name	Anti-DC-SIGN/CD209 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-DC-SIGN/CD209 Antibody Picoband® catalog # A01025-2. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	Q9NNX6

### Technical Details

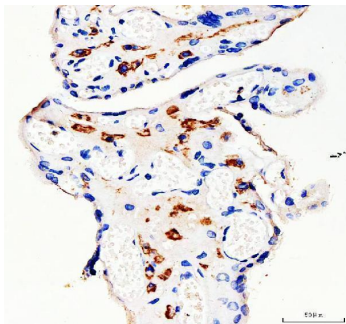
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human DC-SIGN.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).

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, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

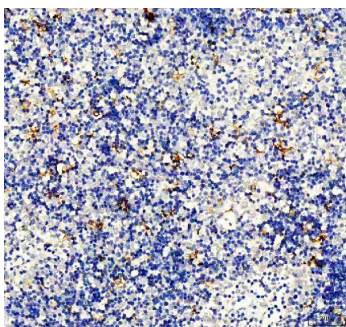
## Anti-DC-SIGN/CD209 Antibody Picoband® (A01025-2) Images



Western blot analysis of DC-SIGN using anti-DC-SIGN antibody (A01025-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human THP-1 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-DC-SIGN antigen affinity purified polyclonal antibody (A01025-2) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for DC-SIGN at approximately 46 kDa. The expected band size for DC-SIGN is at 46 kDa.



IHC analysis of DC-SIGN using anti-DC-SIGN antibody (PA1348). DC-SIGN was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DC-SIGN Antibody (PA1348) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of DC-SIGN using anti-DC-SIGN antibody (PA1348). DC-SIGN was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DC-SIGN Antibody (PA1348) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

## 1 Publications Citing This Product

1. PubMed ID: -, Tongtian Ni, Lili Xu, Silei Sun et al. Fluid Resuscitation via Colon Alleviates Systemic Inflammation in Early Stage of Rats With Severe Acute Pancreatitis, 25 January 2021, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-]

Visit [bosterbio.com/anti-dc-sign-picoband-trade-antibody-a01025-2-boster.html](https://www.bosterbio.com/anti-dc-sign-picoband-trade-antibody-a01025-2-boster.html) to see all 1 publications.

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Anti-DC-SIGN/CD209 Antibody

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