Anti-DC-SIGN Antibody

ER1907-23



Product Type: Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human

Applications: WB, IHC-P, IF-Tissue, FC

Molecular Wt: 45 KDa

Description: Pathogen-recognition receptor expressed on the surface of immature dendritic cells (DCs)

and involved in initiation of primary immune response. Thought to mediate the endocytosis of pathogens which are subsequently degraded in lysosomal compartments. The receptor returns to the cell membrane surface and the pathogen-derived antigens are presented to resting T-cells via MHC class II proteins to initiate the adaptive immune response. Probably recognizes in a calcium-dependent manner high mannose N-linked oligosaccharides in a variety of pathogen antigens, including HIV-1 gp120, HIV-2 gp120, SIV gp120, ebolavirus glycoproteins, cytomegalovirus gB, HCV E2, dengue virus gE, Leishmania pifanoi LPG, Lewis-x antigen in Helicobacter pylori LPS, mannose in Klebsiella pneumonae LPS, dimannose and tri-mannose in Mycobacterium tuberculosis ManLAM and Lewis-x antigen in Schistosoma mansoni SEA. On DCs it is a high affinity receptor for ICAM2 and ICAM3 by binding to mannose-like carbohydrates. May act as a DC rolling receptor that mediates transendothelial migration of DC presursors from blood to tissues by binding endothelial ICAM2. Seems to regulate DC-induced T-cell proliferation by binding to ICAM3 on T-cells in

the immunological synapse formed between DC and T-cells.

Immunogen: KLH conjugated synthetic peptide derived from human DC-SIGN/CD209 51-150/1404

Positive control: Predominantly expressed in dendritic cells and in DC-residing tissues. Also found in

placental macrophages, endothelial cells of placental vascular channels, peripheral blood

mononuclear cells, and THP-1 monocytes.

Subcellular location: Isoform 1, 2, 3, 4, 5, : Cell membrane; Single-pass type II membrane protein (Probable).

Isoform 6, 7, 8, 9, 10, 11, 12: Secreted (Probable).

Database links: SwissProt: Q9NNX6 Human

Recommended Dilutions:

WB 1:500-2000
IHC-P 1:100-500
IF-tissue 1:100-500
FC 1μg/Test

Storage Buffer: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage Instruction: Store at -20°C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is

stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is

stable for at least two weeks at $2-4^{\circ}$ C.

Purity: Protein A affinity purified.

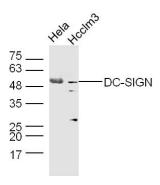
Hangzhou Huaan Biotechnology Co., Ltd.



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Images





Hela Cell Lysate at 40 ug Hcclm3 Cell Lysate at 40 ug

Primary: Anti-DC-SIGN (ER1907-23) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD Observed band size: 50 kD

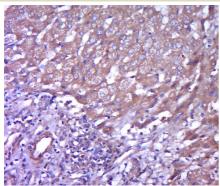


Fig2: Paraformaldehyde-fixed, paraffin embedded (human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DC-SIGN) Polyclonal Antibody, Unconjugated (ER1907-23) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

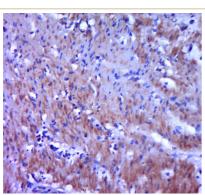


Fig3: Paraformaldehyde-fixed, paraffin embedded (human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DC-SIGN) Polyclonal Antibody, Unconjugated (ER1907-23) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

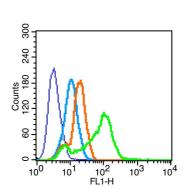


Fig4: Blank control (blue line): MCF7 (blue).

Primary Antibody (green line): Rabbit Anti-DC-SIGN

antibody (ER1907-23) Dilution: 1µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): F(ab')2 fragment goat anti-

rabbit IgG-FITC. Dilution: 1µg /test.

Protocol

The cells were fixed with 2% paraformaldehyde for 10 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2% BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".