abcam

ab245115

Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22395-72
Purification technique	Affinity purification Protein A
Concentration	0.607 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/600
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	-

Target data

See full target information CD209

Function 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. On dendritic cells (DCs) it is a high affinity receptor for ICAM2 and ICAM3 by binding to mannose-like carbohydrates (PubMed:10721994, PubMed:10721995, PubMed:11017109, PubMed:12574325). May act as a DC rolling receptor that mediates transendothelial migration of DC presursors from blood to tissues by binding endothelial ICAM2 (PubMed:11017109). Forms a first contact between DC and resting T cell, througth ICAM3 binding, facilitating the downstream DC-T cell clustering process and DC-induced proliferation of resting T Cells (PubMed:10721994, PubMed:10721995). (Microbial infection) Acts as an attachment receptor for HIV-1 and HIV-2. (Microbial infection) Acts as an attachment receptor for Ebolavirus. (Microbial infection) Acts as an attachment receptor for Cytomegalovirus. (Microbial infection) Acts as an attachment receptor for HCV. (Microbial infection) Acts as an attachment receptor for Dengue virus. (Microbial infection) Acts as an attachment receptor for Measles virus. (Microbial infection) Acts as an attachment receptor for Herpes simplex virus 1. (Microbial infection) Acts as an attachment receptor for Influenzavirus A. (Microbial infection) Acts as an attachment receptor for SARS-CoV. (Microbial infection) Acts as an attachment receptor for Japanese encephalitis virus. (Microbial infection) Acts as an attachment receptor for Lassa virus (PubMed:23966408). Acts as an attachment receptor for Marburg virusn. (Microbial infection) Acts as an attachment receptor for Respiratory syncytial virus. (Microbial infection) Acts as an attachment receptor for Rift valley fever virus and uukuniemi virus. (Microbial infection) Acts as an attachment receptor for West-nile virus. (Microbial infection) Probably recognizes in a calcium-dependent manner high mannose N-linked oligosaccharides in a variety of bacterial pathogen antigens, including Leishmania pifanoi LPG, Lewis-x antigen in Helicobacter pylori LPS, mannose in Klebsiella pneumonae LPS, di-mannose and tri-mannose in Mycobacterium tuberculosis ManLAM and Lewis-x antigen in Schistosoma mansoni SEA (PubMed:16379498). Recognition of M.tuberculosis by dendritic cells occurs partially via this molecule (PubMed:16092920, PubMed:21203928).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

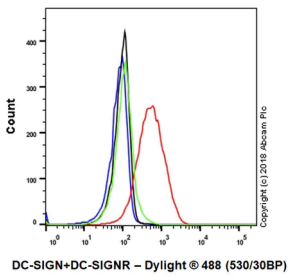
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

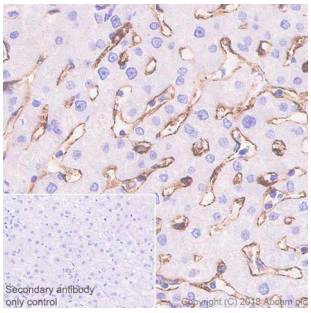
8 product images



Flow Cytometry - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Flow Cytometry staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Flow cytometric analysis of unfixed non-permeabilized THP-1 (human monocytic leukemia cell line) cells treated with 10 ng/ml PMA for 18 hours, then serum starved for 8 hours, then 10 ng/ml PMA for 6 hours and add 1000 U IL4 for 2 hours, then add 10% serum for another 22 hours. DC-SIGN+DC-SIGNR was stained in treated (red) and untreated (green) cells using ab245115 at 1/600 dilution as compared to a Rabbit monoclonal IgG (ab172730, black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody / blue). The secondary antibody was a Goat anti rabbit IgG (Dylight® 488, ab98462) used at 1/2000 dilution. Gated on viable cells. DC-SIGN expression is induced by PMA plus IL4 in THP-1 (PMID: 15070901; PMID: 22675249). DC-SIGNR/CD299 expression is induced by PMA in THP-1 (PMID 30077333).

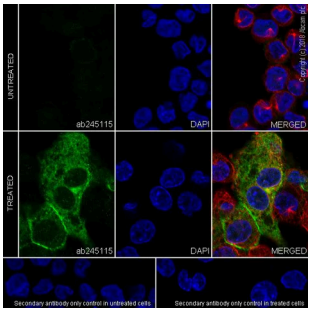


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling DC-SIGN + DC-SIGNR with ab245115 at 1/100 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Cytoplasmic staining on sinusoidal endothelial cells of human liver (PMID: 16816373) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

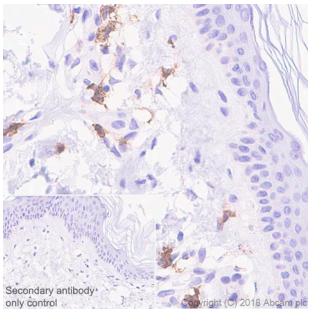


Immunocytochemistry/ Immunofluorescence - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized THP-1 (human monocytic leukemia cell line) cells labeling DC-SIGN + DC-SIGNR with ab245115 at 1/100 dilution, followed by a AlexaFluor®488 Goat anti-Rabbit secondary (ab150077) seconday antibody (green) at 1/1000 dilution.
Confocal image showing cytoplasmic and membranous staining in THP-1 cells treated with 10 ng/ml PMA for 18 hours, then serum starved for 8 hours, then 10 ng/ml PMA for 6 hours and add 1000 U IL4 for 2 hours, then add 10% serum for another 22 hours. DC-SIGN expression is induced by PMA plus IL4 in THP-1(PMID: 15070901; PMID: 22675249). DC-SIGNR/CD299 expression is induced by PMA in THP-1 (PMID 30077333). Tubulin was stained using an Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889)(red) at 1/200 dilution. The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is AlexaFluor®488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution.

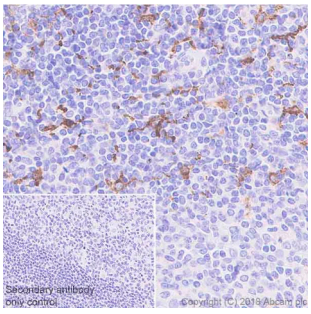


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling DC-SIGN + DC-SIGNR with ab245115 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Cytoplasmic staining on dendritic cell-like cells of human skin (PMID: 11859097; PMID: 11859097) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

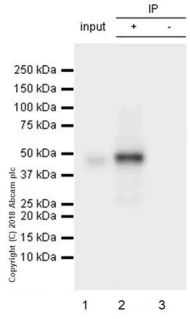


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling DC-SIGN + DC-SIGNR with ab245115 at 1/100 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Cytoplasmic staining on dendritic cell-like cells of human tonsil (PMID: 11859097) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



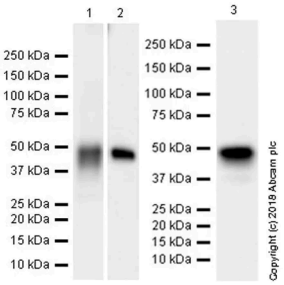
Immunoprecipitation - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN+DC-SIGNR was immunoprecipitated from 0.35 mg human tonsil tissue lysate using ab245115 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab245115 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/1000 dilution.
Lane 1: Human tonsil tissue lysate 10 µg (input).
Lane 2: ab245115 IP in Human tonsil tissue.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab245115 in Human tonsil lysate. (-).

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 1 second.

All lanes:
Immunoprecipitation - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

Observed band size: 44 kDa



Western blot - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

DC-SIGN + DC-SIGNR Western blot staining using rabbit Anti-DC-SIGN + DC-SIGNR antibody

Exposure time:
Lane 1:3 seconds;

Lane 2:92 seconds;

Lane 3:37 seconds

Blocking and dilution buffer: 5% NFDM/TBST

All lanes:
Western blot - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115) at 1/1000 dilution

Lane 1:
Human lymph node tissue lysate at 20 µg

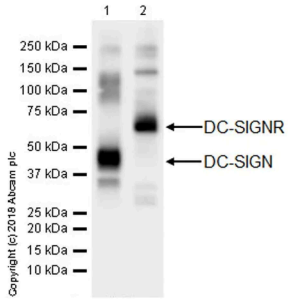
Lane 2:
Human skin tissue lysate at 20 µg

Lane 3:
Human thymus tissue lysate at 20 µg

Secondary

All lanes:
Western blot - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Observed band size: 46 kDa



Western blot - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115)

Blocking and dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-DC-SIGN + DC-SIGNR antibody [EPR22395-72] (ab245115) at 1/1000 dilution

Lane 1:
Recombinant Human DC-SIGN/CD209 Protein (aa59-404) 20 ng

Lane 2:
Recombinant Human DC-SIGNR/CD299 Fc Chimera Protein (aa73-376) 20 ng

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 48 kDa, 66 kDa

Exposure time: 3s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.