

10-10020: Monoclonal Antibody to Dc-Sign/CD209 (Clone: ABM47B7)

Clonality :	Monoclonal
Clone Name :	ABM47B7
Application :	FACS, WB
Reactivity :	Human
Gene :	CD209
Gene ID :	30835
Uniprot ID :	Q9NNX6
Format :	Purified
Alternative Name :	CD209, CLEC4L
Isotype :	Mouse IgG2b Kappa

Immunogen Information : A recombinant protein fragment of DC-Sign protein was used as the immunogen for this antibody.

Description

Dendritic cell-specific intercellular adhesion molecule-3-grabbing non-integrin (DC-SIGN) is a tetrameric C-type (calcium-dependent) lectin that binds, through its C-terminal carbohydrate recognition domain, high mannose N-linked glycans present on the surface of several viral glycoproteins such as human immunodeficiency virus (HIV) gp120 and hepatitis C virus (HCV) E2. It facilitates DC-specific delivery of Ag. This is accomplished by conjugating Ag to receptor-specific Ab or carbohydrate ligands that bind to its carbohydrate recognition domain. In humans, DC-SIGN expression is restricted to DCs and certain types of macrophages. DC-SIGN is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens, including viruses, bacteria, fungi, and parasites. After binding, these pathogens are internalized and pathogen-derived antigens are presented via MHC class I and II molecules to CD8+ and CD4+ T cells, respectively. DC-SIGN represents a promising CLR for targeted vaccine delivery.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 0.1-0.5 µg/ml; FACS: 0.5-1 µg/10⁶ Cells

Reference for expression of Dc-Sign:

Wai K. Lai, Phoebe J. Sun, Jie Zhang, Adam Jennings, Patricia F. Lalor, Stefan Hubscher, Jane A. McKeating, and David H. Adams. Expression of DC-SIGN and DC-SIGNR on Human Sinusoidal Endothelium Am J Pathol. 2006 Jul; 169(1): 200–208. doi: 10.2353/ajpath.2006.051191

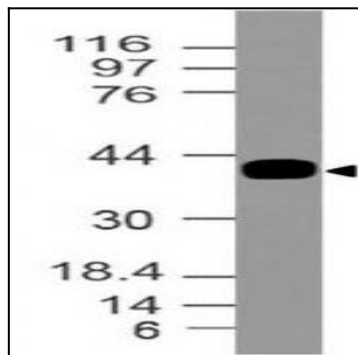


Fig-1: Expression analysis of Dc-Sign. Anti-Dc-Sign antibody (Clone: ABM47B7) was tested at 0.1 $\mu\text{g/ml}$ on partial length recombinant protein.

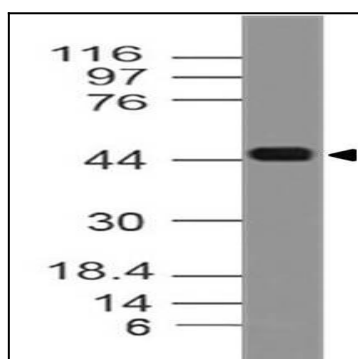


Fig-2: Expression analysis of Dc-Sign. Anti-Dc-Sign antibody (Clone: ABM47B7) was tested at 0.1 $\mu\text{g/ml}$ on human Liver lysate.

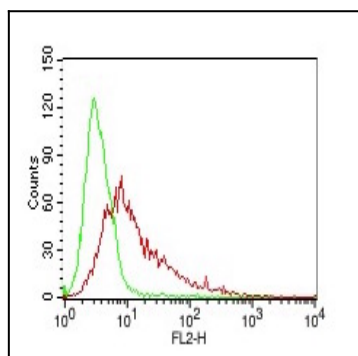


Fig-3: Cell Surface FLOW analysis of Dc-Sign antibody (10-10020) in 293HEK-Dc-sign stable cell line using 0.5 $\mu\text{g}/10^6$ cells. Green represents isotype control, red represents anti- Dc-Sign antibody. Goat anti-mouse PE conjugates was used as secondary antibody.