

DCIR (G-9): sc-374583

BACKGROUND

DCIR (dendritic cell immunoreceptor), is a type II membrane glycoprotein with a single carbohydrate recognition domain (CRD), closest in homology to those of the macrophage lectin and hepatic asialoglycoprotein receptors. The intracellular domain of DCIR contains a consensus immunoreceptor tyrosine-based inhibitory motif. DCIR is expressed on dendritic cells, monocytes, macrophages, B lymphocytes, and granulocytes, but not detected on NK and T cells. DCIR expression in dendritic cells is decreased by signals inducing its maturation, such as LPS, TNF α or CD40. DCIR contains one copy of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses such as protein tyrosine phosphorylation and B-cell-receptor-mediated calcium mobilization. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.

REFERENCES

- Huang, X., et al. 2001. Cloning and characterization of a novel ITIM containing lectin-like immunoreceptor LLIR and its two transmembrane region deletion variants. *Biochem. Biophys. Res. Commun.* 281: 131-140.
- Richard, M., et al. 2002. The expression pattern of the ITIM-bearing lectin CLECSF6 in neutrophils suggests a key role in the control of inflammation. *J. Leukoc. Biol.* 71: 871-880.
- Richard, M., et al. 2003. The ITIM-bearing CLECSF6 (DCIR) is down-modulated in neutrophils by neutrophil-activating agents. *Biochem. Biophys. Res. Commun.* 310: 767-773.

CHROMOSOMAL LOCATION

Genetic locus: CLEC4A (human) mapping to 12p13.31; Clec4a2 (mouse) mapping to 6 F2.

SOURCE

DCIR (G-9) is a mouse monoclonal antibody raised against amino acids 191-237 mapping within a C-terminal extracellular domain of DCIR of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DCIR (G-9) is available conjugated to agarose (sc-374583 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374583 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374583 PE), fluorescein (sc-374583 FITC), Alexa Fluor[®] 488 (sc-374583 AF488), Alexa Fluor[®] 546 (sc-374583 AF546), Alexa Fluor[®] 594 (sc-374583 AF594) or Alexa Fluor[®] 647 (sc-374583 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374583 AF680) or Alexa Fluor[®] 790 (sc-374583 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

DCIR (G-9) is recommended for detection of DCIR isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DCIR siRNA (h): sc-60507, DCIR siRNA (m): sc-60508, DCIR shRNA Plasmid (h): sc-60507-SH, DCIR shRNA Plasmid (m): sc-60508-SH, DCIR shRNA (h) Lentiviral Particles: sc-60507-V and DCIR shRNA (m) Lentiviral Particles: sc-60508-V.

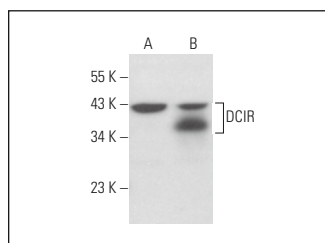
Molecular Weight of DCIR: 35 kDa.

Positive Controls: Raji whole cell lysate, U-698-M whole cell lysate: sc-364799 or CCRF-CEM cell lysate: sc-2225.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



DCIR (G-9): sc-374583. Western blot analysis of DCIR expression in Raji (A) and U-698-M (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Jin, W., et al. 2014. DC-SIGN plays a stronger role than DCIR in mediating HIV-1 capture and transfer. *Virology* 458-459: 83-92.
- Ulezko Antonova, A., et al. 2023. A distinct human cell type expressing MHCII and ROR γ t with dual characteristics of dendritic cells and type 3 innate lymphoid cells. *Proc. Natl. Acad. Sci. USA* 120: e2318710120.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.