

B7RP-1 (2D3): sc-53652

BACKGROUND

T cell costimulatory molecule, inducible costimulator (ICOS)/B7-related protein-1 (B7RP-1, B7-H2, GL50, ICOS-L) is a ligand for the ICOS receptor that initiates T and B cell proliferation and cytokine secretion. B7RP-1 interactions play an essential role in T cell dependent B cell activation in peripheral lymphoid organs such as spleen and lymph nodes. B7RP-1 protein is present in myeloid leukocytes and by northern blot there are 2.4, 3.0 and 7.0 kb transcripts in brain, heart, kidney and liver, with lower expression in colon and thymus and a 1.1 kb transcript in leukocytes. Tumor necrosis factor α (TNF α), granulocyte-macrophage colony-stimulating factor (GM-CSF) and interleukin 4 (IL 4) enhance B7RP-1 expression. LPS induced up regulation of B7RP-1 is dependent on the MyD88 dependent signaling pathway.

REFERENCES

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- Iiyama, R., et al. 2003. The role of inducible costimulator (ICOS)/B7-related protein-1 (B7RP-1) interaction in the functional development of Peyer's patches. *Immunol. Lett.* 88: 63-70.
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STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: ICOSLG (human) mapping to 21q22.3.

SOURCE

B7RP-1 (2D3) is a mouse monoclonal antibody raised against B7RP-1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

B7RP-1 (2D3) is recommended for detection of B7RP-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for B7RP-1 siRNA (h): sc-42768, B7RP-1 shRNA Plasmid (h): sc-42768-SH and B7RP-1 shRNA (h) Lentiviral Particles: sc-42768-V.

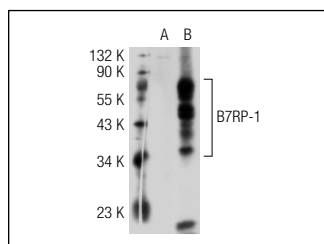
Molecular Weight of B7RP-1: 36 kDa.

Positive Controls: B7RP-1 (h): 293T Lysate: sc-116982, Daudi cell lysate: sc-2415 or human PBL whole cell lysate.

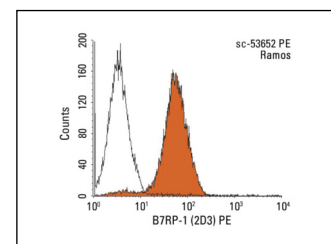
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



B7RP-1 (2D3): sc-53652. Western blot analysis of B7RP-1 expression in non-transfected: sc-117752 (A) and human B7RP-1 transfected: sc-116982 (B) 293T whole cell lysates.



B7RP-1 (2D3): sc-53652. Indirect FCM analysis of Ramos stained with B7RP-1 (2D3), followed by PE-conjugated goat anti-mouse IgG_{2b}: sc-3766. Black line histogram represents the isotype control, normal mouse IgG_{2b}: sc-3879.

RESEARCH USE

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