

RT1-A (OX18): sc-53074

BACKGROUND

RT1-A refers to the rat class I major histocompatibility (MHC I) molecules. RT1-A molecules, which consist of class Ia and class Ib molecules, are integral parts of the immune response and present nonself peptides on the cell surface for recognition by cytotoxic T-lymphocytes (CTLs). They are composed of two polypeptide chains, an α or heavy chain, and β -2-Microglobulin, a non-covalently associated protein. Cytotoxic T lymphocytes bind antigenic peptides presented by RT1-A molecules. Antigens that bind to RT1-A molecules are typically 8-10 residues in length and are stabilized in a peptide binding groove.

REFERENCES

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5. Propper, D.J., Woo, J., Stewart, K.N., Catto, G.R. and Power, D.A. 1991. Immune responses to noninherited maternal RT1-A antigens in inbred rats. *Transplantation* 52: 331-335.
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SOURCE

RT1-A (OX18) is a mouse monoclonal antibody raised against full length spleen cell glycoprotein RT1-A (class I monomorphic) of rat origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RT1-A (OX18) is available conjugated to agarose (sc-53074 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53074 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53074 PE), fluorescein (sc-53074 FITC), Alexa Fluor® 488 (sc-53074 AF488), Alexa Fluor® 546 (sc-53074 AF546), Alexa Fluor® 594 (sc-53074 AF594) or Alexa Fluor® 647 (sc-53074 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53074 AF680) or Alexa Fluor® 790 (sc-53074 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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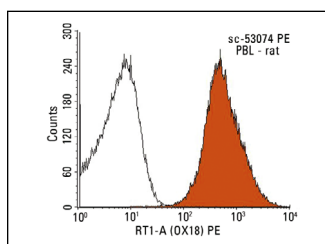
APPLICATIONS

RT1-A (OX18) is recommended for detection of RT1-A of mouse and rat origin by 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), flow cytometry (1 μ g per 1×10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) 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



RT1-A (OX18): sc-53074. Indirect FCM analysis of rat peripheral blood leukocytes stained with RT1-A (OX18), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

STORAGE

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

RESEARCH USE

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