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 self 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


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 µg 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 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53074 HRP), 200 µg/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 µg/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 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

APPLICATIONS

RT1-A (OX18) is recommended for detection of RT1-A of mouse and rat origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10⁶ 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 isotype control, normal mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG1: sc-3877.

DATA

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.