**BACKGROUND**

RT1-A refers to the rat class I major histocompatibility (MHC class 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. Antibodies that bind to RT1-A molecules are typically eight to ten 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 either phycoerythrin (sc-53074 PE) or fluorescein (sc-53074 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

**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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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**

**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 for detailed protocols and support products.