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SM082PX Monoclonal Antibody to MHC Class II RT1Bu - Purified

Quantity:	1 mg
Concentration:	1.0 mg/ml
Uniprot ID:	Q70RH8
NCBI:	10116
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM20P (for use in rat samples), AM03095PU-N
Clone:	OX-3
Immunogen:	Rat thymocyte membrane glycoproteins. Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Format:	**State:** Liquid purified IgG **Purification:** Ion exchange chromatography **Buffer System:** PBS, pH 7.4, containing 0.09% Sodium Azide
Applications:	Flow cytometry: 1/100, use 10 µl of the suggested working dilution to label 10e6 cells in 100 µl. (This product is routinely tested in flow cytometry on Lewis rat splenocytes). Immunohistochemistry on frozen and paraffin sections: This product does not require protein digestion pre-treatment of paraffin embedded sections; This product does not require antigen retrieval using heat treatment prior to staining of paraffin embedded sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises a polymorphic determinant of rat Ia antigen (RT1.Bu) present on Lewis, Wistar and AO strain rats but not BN, DA or PVG/c strains. This antibody is useful for distinguishing Ia positive cells from different rat strains, e.g. for recognising cells of donor origin in bone marrow reconstituted radiation chimaeras. MRC OX-3 cross reacts with mouse strains of MHC haplotypes b and s, and analysis of recombinant mouse strains showed that the determinants mapped to the I-A region. This antibody recognises Ia antigens on B-cells, dendritic cells and certain epithelial cells. **Species:** Rat, mouse (see details above). Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. McMaster WR, Williams AF. Identification of Ia glycoproteins in rat thymus and purification from rat spleen. Eur J Immunol. 1979 Jun;9(6):426-33. PubMed PMID: 315315.
2. McMaster WR, Williams AF. Monoclonal antibodies to Ia antigens from rat thymus: cross reactions with mouse and human and use in purification of rat Ia glycoproteins. Immunol Rev. 1979;47:117-37. PubMed PMID: 398324.
3. Barclay, A.N. and Mayrhofer G. (1981) Bone marrow origin of Ia-positive cells in the medulla of rat thymus. J. Exp. Med. 153: 1666-1671.
4. Barclay AN. The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 1981 Apr;42(4):593-600. PubMed PMID: 7016746.
5. Zhang J, Wu GS, Ishimoto S, Pararajasegaram G, Rao NA. Expression of major histocompatibility complex molecules in rodent retina. Immunohistochemical study. Invest Ophthalmol Vis Sci. 1997 Aug;38(9):1848-57. PubMed PMID: 9286275.
6. Hahm. K.et al. (2000) Loss of TGF - beta signaling contributes to autoimmune pancreatitis. J. Clin. Invest. 105: 1057 - 1065.