

1F-621-C100

## Monoclonal Antibody to MHC Class II (mouse) Fluorescein (FITC) conjugated (0.1 mg)

Clone:	M5/114
Isotype:	Rat IgG2b
Specificity:	The rat monoclonal antibody M5/114 reacts with murine MHC class II glycoproteins. It recognizes a shared determinant on I-Ab, I-Ad, I-Aq, and I-Ed, I-Ek alloantigens, but it does not react with I-Af, I-Ak, I-As. This antibody can inhibit I-A-restricted T cell responses of the H-2b, H-2d, H-2q, H-2u but not H-2f, H-2k, H-2s haplotypes.
Regulatory Status:	RUO
Immunogen:	Activated C57BL/6 mouse spleen cells
Species Reactivity:	Mouse
Preparation:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC.
Concentration:	0.5 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis. Suggested working concentration is 4 $\mu$ g/ml. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
Background:	MHC (major histocompatibility complex) class II molecules are transmembrane glycoproteins expressed on the surface of professional antigen-presenting cells, such as macrophages, dendritic cells and B cells. Before their exposition on the cell surface, the MHC class II molecules react with endocytosed exogenous antigens, which are then presented to the T cells. The antigen-binding grove between MHC class II alpha and beta chain is open at both ends and is 15-24 amino acid residues long.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

References:

\*Bhattacharya A, Dorf ME, Springer TA: A shared alloantigenic determinant on la antigens encoded by the I-A and I-E subregions: evidence for I region gene duplication. J Immunol. 1981 Dec;127(6):2488-95.

\*Viville S, Neefjes J, Lotteau V, Dierich A, Lemeur M, Ploegh H, Benoist C, Mathis D: Mice lacking the MHC class II-associated invariant chain. Cell. 1993 Feb 26;72(4):635-48.

\*De Souza Leao S, Lang T, Prina E, Hellio R, Antoine JC: Intracellular Leishmania amazonensis amastigotes internalize and degrade MHC class II molecules of their host cells. J Cell Sci. 1995 Oct;108 (Pt 10):3219-31.

\*Kleijmeer M, Ramm G, Schuurhuis D, Griffith J, Rescigno M, Ricciardi-Castagnoli P, Rudensky AY, Ossendorp F, Melief CJ, Stoorvogel W, Geuze HJ: Reorganization of multivesicular bodies regulates MHC class II antigen presentation by dendritic cells. J Cell Biol. 2001 Oct 1;155(1):53-63.

\*Beers C, Burich A, Kleijmeer MJ, Griffith JM, Wong P, Rudensky AY: Cathepsin S controls MHC class II-mediated antigen presentation by epithelial cells in vivo. J Immunol. 2005 Feb 1;174(3):1205-12.

\*Kuwano Y, Prazma CM, Yazawa N, Watanabe R, Ishiura N, Kumanogoh A, Okochi H, Tamaki K, Fujimoto M, Tedder TF: CD83 influences cell-surface MHC class II expression on B cells and other antigen-presenting cells. Int Immunol. 2007 Aug;19(8):977-92.

\*Zang W, Kalache S, Lin M, Schroppel B, Murphy B: MHC Class II-mediated apoptosis by a nonpolymorphic MHC Class II peptide proceeds by activation of protein kinase C. J Am Soc Nephrol. 2005 Dec;16(12):3661-8.

\*Clausen BE, Waldburger JM, Schwenk F, Barras E, Mach B, Rajewsky K, Förster I, Reith W: Residual MHC class II expression on mature dendritic cells and activated B cells in RFX5-deficient mice. Immunity. 1998 Feb;8(2):143-55. \*And many other.

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