

1F-690-T100

## Monoclonal Antibody to HLA-DR Fluorescein (FITC) conjugated (100 tests)

Clone: L243

**Isotype:** Mouse IgG2a

**Specificity:** The mouse monoclonal antibody L243 recognizes specifically HLA-DR molecules,

both peptide-loaded and empty.

Regulatory Status: RUO

Immunogen: Human B lymphocytes

**Species Reactivity:** Human, Non-Human Primates, Canine (Dog)

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC and adjusted for

direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

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 of human blood cells using 4

μl reagent / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (0.4 ml) is sufficient for 100 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: HLA-DR, a member of MHC class II glycoproteins, that bind intracellularly

processed peptides and present them to the Th cells, is composed of 36 kDa alpha chain and 27 kDa beta chain, both anchored in the plasma membrane. Together with other MHC II molecules HLA-DR plays a central role in the immune system. It is expressed on antigen-presenting cells (dendritic cells, B lymphocytes,

monocytes, macrophages).



## PRODUCT DATA SHEET

## References:

\*Coral S, Pucillo C, Leonardi A, Fonsatti E, Altomonte M, Maio M: Triggering of HLA-DR antigens differentially modulates tumor necrosis factor alpha release by B cells at distinct stage of maturation. Cell Growth Differ. 1997 May;8(5):581-8.

\*Cantin R, Martin G, Tremblay MJ: A novel virus capture assay reveals a differential acquisition of host HLA-DR by clinical isolates of human immunodeficiency virus type 1 expanded in primary human cells depending on the nature of producing cells and the donor source. J Gen Virol. 2001 Dec;82(Pt 12):2979-87.

\*Kalka-Moll WM, Tzianabos AO, Bryant PW, Niemeyer M, Ploegh HL, Kasper DL: Zwitterionic polysaccharides stimulate T cells by MHC class II-dependent interactions. J Immunol. 2002 Dec 1;169(11):6149-53.

\*Muczynski KA, Ekle DM, Coder DM, Anderson SK: Normal human kidney HLA-DR-expressing renal microvascular endothelial cells: characterization, isolation, and regulation of MHC class II expression. J Am Soc Nephrol. 2003 May;14(5):1336-48.

\*Bouillon M, El Fakhry Y, Girouard J, Khalil H, Thibodeau J, Mourad W: Lipid raft-dependent and -independent signaling through HLA-DR molecules. J Biol Chem. 2003 Feb 28;278(9):7099-107.

\*Swiatek-de Lange M, Rist W, Stahl HF, Weith A, Lenter MC: Comment on "MHC class II expression identifies functionally distinct human regulatory T cells". J Immunol. 2008 Mar 15;180(6):3625; author reply 3626.

\*De Gassart A, Camosseto V, Thibodeau J, Ceppi M, Catalan N, Pierre P, Gatti E: MHC class II stabilization at the surface of human dendritic cells is the result of maturation-dependent MARCH I down-regulation. Proc Natl Acad Sci U S A. 2008 Mar 4;105(9):3491-6.

\*Ivanov A, Beers SA, Walshe CA, Honeychurch J, Alduaij W, Cox KL, Potter KN, Murray S, Chan CH, Klymenko T, Erenpreisa J, Glennie MJ, Illidge TM, Cragg MS: Monoclonal antibodies directed to CD20 and HLA-DR can elicit homotypic adhesion followed by lysosome-mediated cell death in human lymphoma and leukemia cells. J Clin Invest. 2009 Aug;119(8):2143-59.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.