

1F-455-T100

Monoclonal Antibody to CD30 Fluorescein (FITC) conjugated (100 tests)

Clone: MEM-268
Isotype: Mouse IgG

Specificity: The antibody MEM-268 recognizes extracellular part of CD30 (Ki-1 antigen), a 105

kDa single chain glycoprotein expressed on Hodgkin's and Reed-Sternberg cells; it is also found in Burkitt's lymphomas, virus-infected T and B lymphocytes, and on normal B and T lymphocytes after activation (T lymphocytes that produce Th2-type cytokines and on CD4+/CD8+ T lymphocytes that co-express CD45RO and the IL4

receptor).

Regulatory Status: RUO

Immunogen: Expression vector containing CD30 cDNA (booster suspension of THP-1 cell line)

Species Reactivity: Human

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

20 μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (2 ml) is sufficient for 100 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD30 is a type I transmembrane glycoprotein of the TNF receptor superfamily.

CD30 was originally identified as a cell surface antigen of Hodgkins and Reed-Sternberg cells using monoclonal antibody Ki-1. The ligand for CD30 is CD30L (CD153). The binding of CD30 to CD30L mediates pleiotropic effects including cell proliferation, activation, differentiation, and apoptotic cell death. CD30 has a critical role in the pathophysiology of Hodgkin's disease and other CD30+ lymphomas. CD30 acts as a costimulatory molecule in thymic negative selection. In addition to its expression on Hodgkin's and Reed-Sternberg cells, CD30 is also found in some non-Hodgkin's lymphomas (including Burkitt's lymphomas), virus-infected T and B cells, and on normal T and B cells after activation. In T cells, CD30 expression is present on a subset of T cells that produce Th2-type cytokines and on CD4+/CD8+ thymocytes that co-express CD45RO and the IL4 receptor. Soluble form of CD30 (sCD30) serves as a marker

reflecting Th2 immune response.



PRODUCT DATA SHEET

References:

*Blazar BR, Levy RB, Mak TW, Panoskaltsis-Mortari A, Muta H, Jones M, Roskos M, Serody JS, Yagita H, Podack ER, Taylor PA: CD30/CD30 ligand (CD153) interaction regulates CD4+ T cell-mediated graft-versus-host disease. J Immunol. 2004 Sep 1;173(5):2933-41.

*Fischer M, Harvima IT, Carvalho RF, Möller C, Naukkarinen A, Enblad G, Nilsson G: Mast cell CD30 ligand is upregulated in cutaneous inflammation and mediates degranulation-independent chemokine secretion. J Clin Invest. 2006 Oct;116(10):2748-56.

*Kennedy MK, Willis CR, Armitage RJ: Deciphering CD30 ligand biology and its role in humoral immunity. Immunology. 2006 Jun;118(2):143-52.

*Polte T, Behrendt AK, Hansen G: Direct evidence for a critical role of CD30 in the development of allergic asthma. J Allergy Clin Immunol. 2006 Oct;118(4):942-8.

*Bekiaris V, Withers D, Glanville SH, McConnell FM, Parnell SM, Kim MY, Gaspal FM, Jenkinson E, Sweet C, Anderson G, Lane PJ: Role of CD30 in B/T segregation in the spleen. J Immunol. 2007 Dec 1;179(11):7535-43.

*Kusanovic JP, Romero R, Hassan SS, Gotsch F, Edwin S, Chaiworapongsa T, Erez O, Mittal P, Mazaki-Tovi S, Soto E, Than NG, Friel LA, Yoon BH, Espinoza J: Maternal serum soluble CD30 is increased in normal pregnancy, but decreased in preeclampsia and small for gestational age pregnancies. J Matern Fetal Neonatal Med. 2007 Aug 28;:1-12

*Zeiser R, Nguyen VH, Hou JZ, Beilhack A, Zambricki E, Buess M, Contag CH, Negrin RS: Early CD30 signaling is critical for adoptively transferred CD4+CD25+ regulatory T cells in prevention of acute graft-versus-host disease. Blood. 2007 Mar 1;109(5):2225-33.

*Wright CW, Rumble JM, Duckett CS: CD30 activates both the canonical and alternative NF-kappaB pathways in anaplastic large cell lymphoma cells. J Biol Chem. 2007 Apr;282(14):10252-62.

*Pavlov I, Martins TB, Delgado JC: Development and validation of a fluorescent microsphere immunoassay for soluble CD30 testing. Clin Vaccine Immunol. 2009 Sep;16(9):1327-31.

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.