

A6-455-T025

Monoclonal Antibody to CD30 Alexa Fluor® 647 conjugated (25 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).
Immunogen:	Expression vector containing CD30 cDNA (booster suspension of THP-1 cell line)
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Alexa Fluor® 647 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
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. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 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.

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

**Antibodies****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.

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