

AM26799FC-N**Monoclonal Antibody to CD30 - FITC**

Alternate names:	CD30L receptor, D1S166E, Ki-1 antigen, Lymphocyte activation antigen CD30, TNFRSF8, Tumor necrosis factor receptor superfamily member 8
Quantity:	100 Tests
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.
Uniprot ID:	P28908
NCBI:	NP_001234.2
GeneID:	943
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10F (for use in human samples)
Clone:	Ber-H8
Format:	State: Liquid purified Ig fraction Buffer System: Phosphate buffered saline (PBS) solution containing 15mM sodium azide Label: FITC – Conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use.
Applications:	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 (0.4 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody 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).
Species Reactivity:	Tested: Human

Storage:

Store the antibody at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General Readings:

1. Franke AC, Jung D, Ellis TM. Characterization of the CD30L binding domain on the human CD30 molecule using anti-CD30 antibodies. *Hybridoma*. 2000 Feb;19(1):43-8. PubMed PMID: 10768840.
2. Matsumoto K, Terakawa M, Miura K, Fukuda S, Nakajima T, Saito H. Extremely rapid and intense induction of apoptosis in human eosinophils by anti-CD30 antibody treatment in vitro. *J Immunol*. 2004 Feb 15;172(4):2186-93. PubMed PMID: 14764685.
3. Berro AI, Perry GA, Agrawal DK. Increased expression and activation of CD30 induce apoptosis in human blood eosinophils. *J Immunol*. 2004 Aug 1;173(3):2174-83. PubMed PMID: 15265955.
4. Falini B, Pileri S, Pizzolo G, Dürkop H, Flenghi L, Stirpe F, et al. CD30 (Ki-1) molecule: a new cytokine receptor of the tumor necrosis factor receptor superfamily as a tool for diagnosis and immunotherapy. *Blood*. 1995 Jan 1;85(1):1-14. PubMed PMID: 7803786.
5. Aalberse JA, Kapitein B, de Roock S, Klein MR, de Jager W, van der Zee R, et al. Cord blood CD4+ T cells respond to self heat shock protein 60 (HSP60). *PLoS One*. 2011;6(9):e24119. doi: 10.1371/journal.pone.0024119. Epub 2011 Sep 13. PubMed PMID: 21931651.
6. Heneberg P, Riegerová K, Kučera P. Pimecrolimus Is a Potent Inhibitor of Allergic Reactions to Hymenopteran Venom Extracts and Birch Pollen Allergen In Vitro. *PLoS One*. 2015 Nov 12;10(11):e0142953. doi: 10.1371/journal.pone.0142953. eCollection 2015. PubMed PMID: 26562153.

Pictures:

Surface staining of K562 cells with anti-human CD30 (Ber-H8) purified, GAM APC.

