

PRODUCT INFORMATION



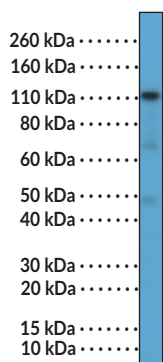
TNFRSF8/CD30 (C-Term) Rabbit Monoclonal Antibody (Clone RM425)

Item No. 35317

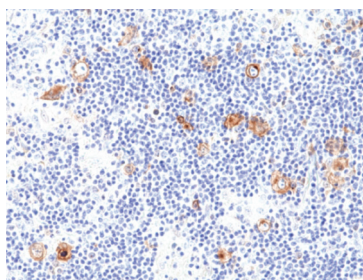
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified rabbit monoclonal antibody.
Synonyms:	D1S166E, Ki-1, Tumor Necrosis Factor Receptor Superfamily Member 8
Immunogen:	Peptide from the C-terminal region of human CD30
Cross Reactivity:	(+) CD30
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM425
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:100-1:250 for IHC and 1:100-1:2,500 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

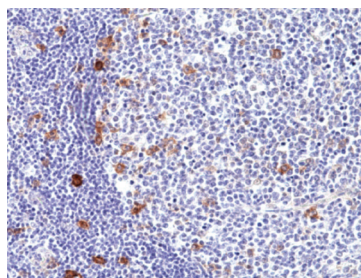
Images



WB of K562 cell lysates using TNFRSF8/CD30 (C-Term) Rabbit Monoclonal Antibody (Clone RM425) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human Hodgkin's lymphoma tissue using TNFRSF8/CD30 (C-Term) Rabbit Monoclonal Antibody (Clone RM425) at a dilution of 1:100.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using TNFRSF8/CD30 (C-Term) Rabbit Monoclonal Antibody (Clone RM425) at a dilution of 1:100.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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PRODUCT INFORMATION



Description

CD30, also known as tumor necrosis factor receptor superfamily member 8 (TNFRSF8), is a type I transmembrane glycoprotein encoded by *TNFRSF8* in humans.^{1,2} Alternative splicing of the *TNFRSF8* pre-mRNA produces one full-length isoform, CD30 long, and two short isoforms that contain truncated transmembrane and/or extracellular domains.^{1,3} CD30 exists as a monomer and is composed of an extracellular domain containing three cysteine-rich repeats (CRDs), a transmembrane domain, and a C-terminal cytoplasmic domain that facilitates intracellular signaling.² It is expressed on certain subsets of activated T- or B cells, as well as in a variety of lymphoid neoplasms, including Hodgkin lymphoma and anaplastic large cell lymphomas (ALCLs).¹ It can also exist in a soluble form, which is produced by proteolytic cleavage of CD30 at the cell surface and is found in the serum.^{1,2} CD30 is upregulated by mitogens, such as phorbol 12-myristate 13-acetate (TPA; Item No. 10008014), or viral stimulation, including Epstein-Barr virus (EBV) or HIV, as well as by the transcription factor JunB.^{1,3} Upon interaction with its ligand, TNFSF8/CD30L, which is also expressed on certain subsets of activated lymphocytes, CD30 assembles into a trimer that recruits TNF receptor-associated factor 1 (TRAF1), TRAF2, and TRAF5 to induce NF- κ B- or ERK/MAPK-dependent downstream signaling, mediating a variety of cellular processes, including NF- κ B activation, cell proliferation and survival, as well as apoptosis.^{1,2} Neutralization of CD30 with a monoclonal antibody reduces tumor growth in an ALCL patient-derived xenograft (PDX) mouse model.⁴ Serum levels of soluble CD30 (sCD30) are correlated with disease stage in patients with Hodgkin lymphoma or systemic lupus erythematosus (SLE).² Cayman's TNFRSF8/CD30 (C-Term) Rabbit Monoclonal Antibody (Clone RM425) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Gottesman, S.R.S. CD30: Receptor, marker, target. *Pathol. Lab. Med. Int.* **8(1)**, 27-36 (2016).
2. van de Weyden, C.A., Pileri, S.A., Feldman, A.L., *et al.* Understanding CD30 biology and therapeutic targeting: A historical perspective providing insight into future directions. *Blood Cancer J.* **7(9)**, e603 (2017).
3. Horie, R., Ito, K., Tatewaki, M., *et al.* A variant CD30 protein lacking extracellular and transmembrane domains is induced in HL-60 by tetradecanoylphorbol acetate and is expressed in alveolar macrophages. *Blood* **88(7)**, 2422-2432 (1996).
4. Pfeifer, W., Levi, E., Petrogiannis-Hailotis, T., *et al.* A murine xenograft model for human CD30⁺ anaplastic large cell lymphoma. *Am. J. Pathol.* **155(4)**, 1353-1359 (1999).

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