

CD30L (RM153): sc-19984

BACKGROUND

The tumor necrosis factor (TNF) receptor family is composed of several type I integral membrane glycoproteins that exhibit homology in their cysteine-rich extracellular domains. Members of this family include FAS, OX40, CD27 and CD30. Ligands for these receptors are often type II transmembrane glycoproteins, as is the case for CD27 and CD30. CD27 is a homodimeric lymphocyte-specific surface antigen present on T and B lymphocytes. Activation of the CD3 complex via the T cell receptor for antigen leads to an increase in CD27 expression. Together, CD27 and its ligand, CD27L, generate co-stimulatory signals required for complete T cell activation. CD30 is a surface marker for neoplastic cells of the Hodgkin's lymphoma and related hematologic malignancies. CD30L has been shown to enhance the proliferation of the Hodgkin's cell line HDLM-2, but exerts antiproliferative effects on large cell anaplastic lymphoma cell lines.

REFERENCES

- Smith, C.A., et al. 1993. CD30 antigen, a marker for Hodgkin's lymphoma, is a receptor whose ligand defines an emerging family of cytokines with homology to TNF. *Cell* 73: 1349-1360.
- Armitage, R.J. 1994. Tumor necrosis factor receptor superfamily members and their ligands. *Curr. Opin. Immunol.* 6: 407-413.
- Hintzen, R.Q., et al. 1994. CD27: marker and mediator of T cell activation. *Immunol. Today* 15: 307-311.
- Gruss, H.J., et al. 1995. Tumor necrosis factor ligand superfamily: involvement in the pathology of malignant lymphomas. *Blood* 85: 3378-3404.
- Wendtner, C.M., et al. 1995. CD30 ligand signal transduction involves activation of a tyrosine kinase and of mitogen-activated protein kinase in a Hodgkin's lymphoma cell line. *Cancer Res.* 55: 4157-4161.
- Lens, S.M., et al. 1995. CD27-CD70 interaction: unravelling its implication in normal and neoplastic B cell growth. *Leuk. Lymphoma* 18: 51-59.
- Bowen, M.A., et al. 1996. Structure and expression of murine CD30 and its role in cytokine production. *J. Immunol.* 156: 442-449.

CHROMOSOMAL LOCATION

Genetic locus: *Tnfsf8* (mouse) mapping to 4 C1.

SOURCE

CD30L (RM153) is a rat monoclonal antibody raised against CHO cells transfected with mouse CD153 gene (*Tnfsf8*).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for biological studies, sc-19984 L, 200 µg/0.1 ml.

CD30L (RM153) is available conjugated to agarose (sc-19984 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-19984 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19984 PE), fluorescein (sc-19984 FITC), Alexa Fluor[®] 488 (sc-19984 AF488), Alexa Fluor[®] 546 (sc-19984 AF546), Alexa Fluor[®] 594 (sc-19984 AF594) or Alexa Fluor[®] 647 (sc-19984 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-19984 AF680) or Alexa Fluor[®] 790 (sc-19984 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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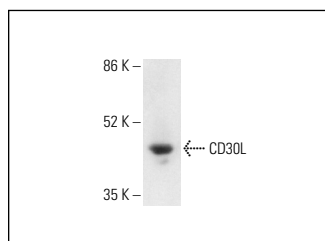
APPLICATIONS

CD30L (RM153) is recommended for detection of CD30L of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

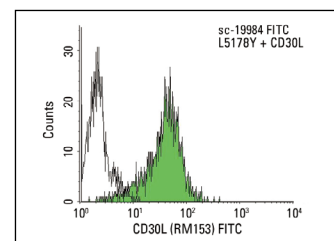
Suitable for use as control antibody for CD30L siRNA (m): sc-42832, CD30L shRNA Plasmid (m): sc-42832-SH and CD30L shRNA (m) Lentiviral Particles: sc-42832-V.

Molecular Weight of CD30L: 40 kDa.

DATA



CD30L (RM153): sc-19984. Western blot analysis of CD30L expression in MCF7 whole cell lysate. Detection reagent used: anti-rat IgG-HRP.



CD30L (RM153) FITC: sc-19984 FITC. FCM analysis of L5178Y-CD30L stable transfectant cell line. Black line histogram represents the isotype control, normal rat IgG_{2b}-FITC: sc-2831. Transfected cell line kindly provided by Ko Okumura at Juntendo University School of Medicine.

SELECT PRODUCT CITATIONS

- Scuderi, S.A., et al. 2021. NLRP3 inflammasome inhibitor BAY-117082 reduces oral squamous cell carcinoma progression. *Int. J. Mol. Sci.* 22: 11108.

RESEARCH USE

For research use only, not for use in diagnostic procedures.