SANTA CRUZ BIOTECHNOLOGY, INC.

CD30 (Ber-H2): sc-19658

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

The tumor necrosis factor (TNF) receptor family is composed of several type I integral membrane glycoproteins that exhibit homology in their cystine-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.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF8 (human) mapping to 1p36.22.

SOURCE

CD30 (Ber-H2) is a mouse monoclonal antibody raised against a cell suspension of Co cells.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD30 (Ber-H2) is available conjugated to agarose (sc-19658 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-19658 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19658 PE), fluorescein (sc-19658 FITC), Alexa Fluor® 488 (sc-19658 AF488), Alexa Fluor® 546 (sc-19658 AF546), Alexa Fluor® 594 (sc-19658 AF594) or Alexa Fluor® 647 (sc-19658 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-19658 AF680) or Alexa Fluor® 790 (sc-19658 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

CD30 (Ber-H2) is recommended for detection of CD30 of human 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 10^6 cells).

Suitable for use as control antibody for CD30 siRNA (h): sc-29991, CD30 shRNA Plasmid (h): sc-29991-SH and CD30 shRNA (h) Lentiviral Particles: sc-29991-V.

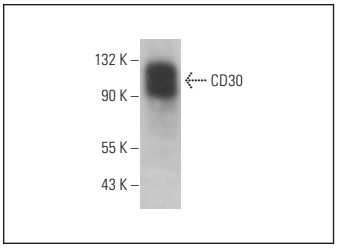
Molecular Weight of CD30: 120 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

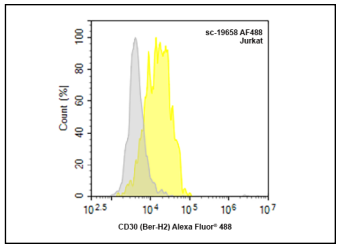
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CD30 (Ber-H2): sc-19658. Western blot analysis of CD30 expression in Jurkat whole cell lysate.



CD30 (Ber-H2) Alexa Fluor® 488: sc-19658 AF488. FCM analysis of Jurkat cells. Gray histogram represents the isotype control, normal mouse IgG_1: sc-3890.

SELECT PRODUCT CITATIONS

1. Berro, A.I., et al. 2004. Increased expression and activation of CD30 induce apoptosis in human blood eosinophils. J. Immunol. 173: 2174-2183.
2. Thomson, A. 2008. Human embryonic stem cells passaged using enzymatic methods retain a normal karyotype and express CD30. Cloning Stem Cells 10: 89-106.
3. Marzano, A.V., et al. 2009. Primary cutaneous T-cell lymphoma expressing FOXP3: a case report supporting the existence of malignancies of regulatory T cells. J. Am. Acad. Dermatol. 61: 348-355.
4. Palma, I., et al. 2013. Detection of Epstein-Barr virus and genotyping based on EBNA2 protein in Mexican patients with hodgkin lymphoma: a comparative study in children and adults. Clin. Lymphoma Myeloma Leuk. 13: 266-272.
5. Hasanali, Z.S., et al. 2014. Vorinostat downregulates CD30 and decreases brentuximab vedotin efficacy in human lymphocytes. Mol. Cancer Ther. 13: 2784-2792.
6. Bolognesi, M.M., et al. 2021. Antibodies validated for routinely processed tissues stain frozen sections unpredictably. Biotechniques 70: 137-148.
7. Gerhard-Hartmann, E., et al. 2022. Epstein-Barr virus infection patterns in nodular lymphocyte-predominant Hodgkin lymphoma. Histopathology 80: 1071-1080.

STORAGE

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