

CD30 (C-3): sc-46683



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 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.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF8 (human) mapping to 1p36.22; Tnfrsf8 (mouse) mapping to 4 E1.

SOURCE

CD30 (C-3) is a mouse monoclonal antibody raised against amino acids 416-595 mapping within a C-terminal cytoplasmic domain of CD30 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD30 (C-3) is available conjugated to agarose (sc-46683 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46683 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-46683 PE), fluorescein (sc-46683 FITC), Alexa Fluor® 488 (sc-46683 AF488), Alexa Fluor® 546 (sc-46683 AF546), Alexa Fluor® 594 (sc-46683 AF594) or Alexa Fluor® 647 (sc-46683 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-46683 AF680) or Alexa Fluor® 790 (sc-46683 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CD30 (C-3) is recommended for detection of CD30 long and short form of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:5000), 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD30 siRNA (h): sc-29991, CD30 siRNA (m): sc-37244, CD30 shRNA Plasmid (h): sc-29991-SH, CD30 shRNA Plasmid (m): sc-37244-SH, CD30 shRNA (h) Lentiviral Particles: sc-29991-V and CD30 shRNA (m) Lentiviral Particles: sc-37244-V.

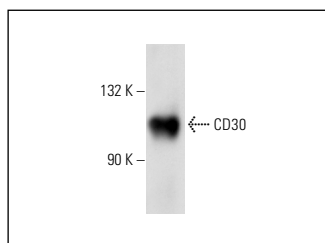
Molecular Weight of CD30: 120 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, BW5147 cell lysate: sc-3800 or HeLa whole cell lysate: sc-2200.

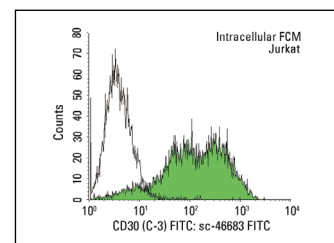
RECOMMENDED SUPPORT REAGENTS

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 (D-3): sc-46683. Western blot analysis of CD30 expression in BW5147 whole cell lysate.



CD30 (C-3): sc-46683. Indirect, intracellular FCM analysis of fixed and permeabilized PMA-induced Jurkat cells stained with CD30 (C-3), followed by FITC-conjugated goat anti-mouse IgG₁: sc-2078. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

SELECT PRODUCT CITATIONS

1. Danielson, L.S., et al. 2015. Limited miR-17-92 overexpression drives hematologic malignancies. *Leuk. Res.* 39: 335-341.
2. Wang, L., et al. 2016. Follicular dendritic cell sarcoma of the spleen: a case report and review of the literature. *Oncol. Lett.* 12: 2062-2064.
3. Cardoso, M.T., et al. 2016. Characterization of teratogenic potential and gene expression in canine and feline amniotic membrane-derived stem cells. *Reprod. Domest. Anim. Suppl.* 2: 58-64.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

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