# CD30 (C-20): sc-1737



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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD30 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1737 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

# **APPLICATIONS**

CD30 (C-20) is recommended for detection of CD30 long and short form of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

CD30 (C-20) is also recommended for detection of CD30 long and short form in additional species, including equine and bovine.

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.

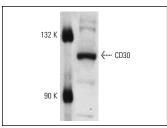
Molecular Weight of CD30: 120 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or MOLT-4 cell lysate: sc-2233.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



CD30 (C-20): sc-1737. Western blot analysis of CD30 expression in HeLa whole cell lysate.

CD30 (C-20): sc-1737. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**A,B**).

### **SELECT PRODUCT CITATIONS**

- Horie, R., et al. 2002. Ligand-independent signaling by overexpressed CD30 drives NFκB activation in Hodgkin-Reed-Sternberg cells. Oncogene 21: 2496-2503.
- Horie, R., et al. 2002. Cytoplasmic aggregation of TRAF2 and TRAF5 proteins in the Hodgkin-Reed-Sternberg cells. Am. J. Pathol. 160: 1647-1654.
- 3. Herszfeld, D., et al. 2006. CD30 is a survival factor and a biomarker for transformed human pluripotent stem cells. Nat. Biotechnol. 24: 351-357.
- Soussain, C., et al. 2007. Characterization and magnetic resonance imaging of a rat model of human B-cell central nervous system lymphoma. Clin. Cancer Res. 13: 2504-2511.

# **RESEARCH USE**

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

# **PROTOCOLS**

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



Try CD30 (C-3): sc-46683 or CD30 (B-10): sc-514271, our highly recommended monoclonal alternatives to CD30 (C-20).