SANTA CRUZ BIOTECHNOLOGY, INC.

CD27L (G-7): sc-365539

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.

REFERENCES

1. 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.
2. Armitage, R.J. 1994. Tumor necrosis factor receptor superfamily members and their ligands. Curr. Opin. Immunol. 6: 407-413.
3. Hintzen, R.Q., et al. 1994. CD27: marker and mediator of T-cell activation. Immunol. Today 15: 307-311.
4. Lens, S.M., et al. 1995. CD27-CD70 interaction: unravelling its implication in normal and neoplastic B cell growth. Leuk. Lymphoma 18: 51-59.

CHROMOSOMAL LOCATION

Genetic locus: CD70 (human) mapping to 19p13.3; Cd70 (mouse) mapping to 17 D.

SOURCE

CD27L (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 168-192 at the C-terminus of CD27L of human origin.

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.

CD27L (G-7) is available conjugated to agarose (sc-365539 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365539 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365539 PE), fluorescein (sc-365539 FITC), Alexa Fluor® 488 (sc-365539 AF488), Alexa Fluor® 546 (sc-365539 AF546), Alexa Fluor® 594 (sc-365539 AF594) or Alexa Fluor® 647 (sc-365539 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365539 AF680) or Alexa Fluor® 790 (sc-365539 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365539 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

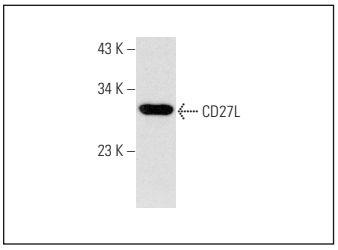
CD27L (G-7) is recommended for detection of CD27L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 CD27L siRNA (h): sc-42764, CD27L siRNA (m): sc-42765, CD27L shRNA Plasmid (h): sc-42764-SH, CD27L shRNA Plasmid (m): sc-42765-SH, CD27L shRNA (h) Lentiviral Particles: sc-42764-V and CD27L shRNA (m) Lentiviral Particles: sc-42765-V.

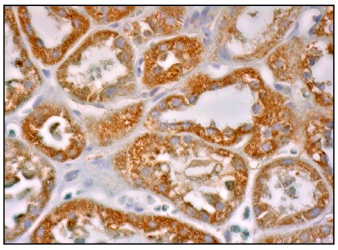
Molecular Weight of CD27L: 29 kDa.

Positive Controls: RAW 264.7 + LPS/PMA cell lysate: sc-2212 or RAW 264.7 whole cell lysate: sc-2211.

DATA



CD27L (G-7): sc-365539. Western blot analysis of CD27L expression in PMA/LPS treated RAW 264.7 whole cell lysate.



CD27L (G-7): sc-365539. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

1. Yang, G., et al. 2015. Quantitative analysis of differential proteome expression in bladder cancer vs. Normal bladder cells using SILAC method. PLoS ONE 10: e0134727.
2. Rahman, M., et al. 2018. Analysis of immunobiologic markers in primary and recurrent glioblastoma. J. Neurooncol. 137: 249-257.
3. Yang, M., et al. 2020. Tandem CAR-T cells targeting CD70 and B7-H3 exhibit potent preclinical activity against multiple solid tumors. Theranostics 10: 7622-7634.

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.