

CD137L (D-20): sc-11819

BACKGROUND

CD137, also designated ILA and 4-1BB in mouse, belongs to the tumor necrosis factor receptor family and delivers a costimulatory signal to T lymphocytes. CD137 is expressed on activated T cells and binds an inducible ligand that is found on B cells, macrophages and dendritic cells. Interactions between CD137 and its ligand are involved in antigen presentation and the generation of cytotoxic T cells. Crosslinking of the CD137 ligand induces apoptosis in resting lymphocytes. In contrast, CD137 regulates peripheral monocyte survival by inducing a cytokine release profile, and is mediated by M-CSF and to a lesser extent by granulocyte-macrophage colony-stimulating factor and IL-3. Soluble forms of CD137 are found in sera from patients with rheumatoid arthritis and may provide a negative control mechanism for immune responses.

REFERENCES

1. Michel, J., Pauly, S., Langstein, J., Krammer, P.H. and Schwarz, H. 1999. CD-137-induced apoptosis is independent of CD95. *Immunology* 98: 42-46.
2. Langstein, J. and Schwarz, H. 1999. Identification of CD137 as a potent monocyte survival factor. *J. Leukoc. Biol.* 65: 829-833.

CHROMOSOMAL LOCATION

Genetic locus: *Tnfrsf9* (mouse) mapping to 17 D.

SOURCE

CD137L (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CD137L of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11819 P, (100 µg 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

CD137L (D-20) is recommended for detection of CD137L of mouse and rat 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD137L siRNA (m): sc-42828, CD137L shRNA Plasmid (m): sc-42828-SH and CD137L shRNA (m) Lentiviral Particles: sc-42828-V.

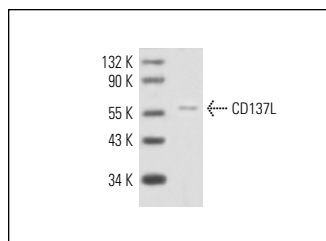
Molecular Weight of CD137L: 60 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, CTLL-2 cell lysate: sc-2242 or J774.A1 cell lysate: sc-3802.

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



CD137L (D-20): sc-11819. Western blot analysis of CD137L expression in CTLL-2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Kim, Y.M., Kim, H.K., Kim, H.J., Lee, H.W., Ju, S.A., Choi, B.K., Kwon, B.S., Kim, B.S., Kim, J.B., Lim, Y.T. and Yoon, S. 2009. Expression of 4-1BB and 4-1BBL in thymocytes during thymus regeneration. *Exp. Mol. Med.* 41: 896-911.
2. Jin, H.J., Sui, H.X., Wang, Y.N. and Gao, F.G. 2013. Nicotine up-regulated 4-1BBL expression by activating Mek-PI3K pathway augments the efficacy of bone marrow-derived dendritic cell vaccination. *J. Clin. Immunol.* 33: 246-254.

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.

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Try **CD137L (G-10): sc-398933** or **CD137L (AT113-2): sc-58949**, our highly recommended monoclonal alternatives to CD137L (D-20).