

# CD137L (G-10): sc-398933

## 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., et al. 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: TNFSF9 (human) mapping to 19p13.3; Tnfsf9 (mouse) mapping to 17 D.

## SOURCE

CD137L (G-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 41-67 near the N-terminus of CD137L of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-398933 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

CD137L (G-10) is recommended for detection of CD137L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 (h): sc-42827, CD137L siRNA (m): sc-42828, CD137L shRNA Plasmid (h): sc-42827-SH, CD137L shRNA Plasmid (m): sc-42828-SH, CD137L shRNA (h) Lentiviral Particles: sc-42827-V and CD137L shRNA (m) Lentiviral Particles: sc-42828-V.

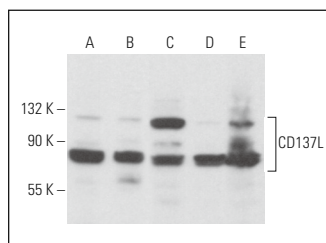
Molecular Weight of CD137L: 60 kDa.

Positive Controls: RBL-1 whole cell lysate: sc-364790, TK-1 whole cell lysate: sc-364798 or SP2/0 whole cell lysate: sc-364795.

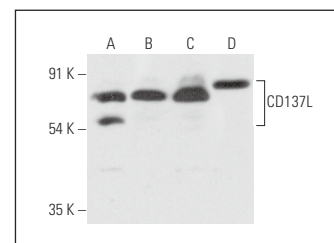
## RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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



CD137L (G-10): sc-398933. Western blot analysis of CD137L expression in TK-1 (A), IB4 (B), CCRF-CEM (C), HCT-116 (D) and HUV-EC-C (E) whole cell lysates.



CD137L (G-10): sc-398933. Western blot analysis of CD137L expression in SP2/0 (A), TK-1 (B), P388D1 (C) and RBL-1 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Tsai, Y.C., et al. 2022. Raspberry ketone promotes FNDC5 protein expression via HO-1 upregulation in 3T3-L1 adipocytes. *Chin. J. Physiol.* 65: 80-86.
2. Li, Y., et al. 2022. Efficacy of bivalent CEACAM6/4-1BBL genetic vaccine combined with anti-PD1 antibody in MC38 tumor model of mice. *Heliyon* 8: e10775.

## 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](http://www.scbt.com) for detailed protocols and support products.