SANTA CRUZ BIOTECHNOLOGY, INC.

CD48 (F-15): sc-31191



BACKGROUND

CD48 is a GPI-anchored glycoprotein that may act as a low affinity receptor for CD2. CD48 is expressed on all peripheral blood T, B and null cells, thymocytes, eosinophils, a portion of bone marrow cells and some epithelial cells. Rat CD48 is found on hematopoietic and endothelial cells, and mouse CD48 is found on thymocytes, lymph node cells, most macrophages and bone marrow cells. CD48 has been shown to be associated with the tyrosine kinase Lck.

REFERENCES

- Vaughan, H.A., et al. 1983. Hu Ly-M3—a human leukocyte antigen. Transplantation 36: 446-450.
- Arvieux, J., et al. 1986. MRC 0X-45 antigen: a leucocyte/endothelium rat membrane glycoprotein of 45,000 molecular weight. Mol. Immunol. 23: 983-990.
- Garnett, D., et al. 1993. The association of the protein tyrosine kinases p56lck and p60fyn with the glycosyl phosphatidylinositol-anchored proteins Thy-1 and CD48 in rat thymocytes is dependent on the state of cellular activation. Eur. J. Immunol. 23: 2540-2544.
- Katsuura, M., et al. 1994. Increased expression of CD48 on neutrophils activated in childhood patients with aplastic anemia. Int. J. Hematol. 60: 281-285.
- 5. Davis, S.J., et al. 1996. The structure and ligand interactions of CD2: implications for T-cell function. Immunol. Today 17: 177-187.
- 6. Tissot, C., et al. 1997. Both human α/β and gamma interferons upregulate the expression of CD48 cell surface molecules. J. Interferon Cytokine Res. 17: 17-26.

CHROMOSOMAL LOCATION

Genetic locus: CD48 (human) mapping to 1q23.3; Cd48 (mouse) mapping to 1 H3.

SOURCE

CD48 (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD48 of human 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-31191 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

CD48 (F-15) is recommended for detection of CD48 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 CD48 siRNA (h): sc-35008, CD48 siRNA (m): sc-35009, CD48 shRNA Plasmid (h): sc-35008-SH, CD48 shRNA Plasmid (m): sc-35009-SH, CD48 shRNA (h) Lentiviral Particles: sc-35008-V and CD48 shRNA (m) Lentiviral Particles: sc-35009-V.

Molecular Weight of CD48: 43 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Jurkat whole cell lysate: sc-2204 or CTLL-2 cell lysate: sc-2242.

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) Immunofluo-rescence: 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.

RESEARCH USE

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

MONOS Satisfation Guaranteed Try CD48 (5-4.8): sc-8400 or CD48 (4H9): sc-8397, our highly recommended monoclonal alternatives to CD48 (F-15).