

CD48 (HM48-1): sc-19666

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 OX-45 antigen: a leucocyte/endothelium rat membrane glycoprotein of 45,000 molecular weight. *Mol. Immunol.* 23: 983-990.
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- Bazil, V., et al. 1989. Monoclonal antibodies against human leucocyte antigens. III. Antibodies against CD45R, CD6, CD44 and two newly described broadly expressed glycoproteins MEM-53 and MEM-102. *Folia Biol.* 35: 289-297.
- Knapp, W., et al. 1989. *Leucocyte Typing IV*. Oxford University Press.
- Korinek, V., et al. 1991. The human leucocyte antigen CD48 (MEM-102) is closely related to the activation marker Blast-1. *Immunogenetics* 33: 108-112.
- Garnett, D., et al. 1993. The association of the protein tyrosine kinases p56^{lck} and p60^{fyn} 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.

CHROMOSOMAL LOCATION

Genetic locus: Cd48 (mouse) mapping to 1 H3.

SOURCE

CD48 (HM48-1) is an Armenian hamster monoclonal antibody raised against mouse T lymphoma MBL-2.

PRODUCT

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

CD48 (HM48-1) is available conjugated to either phycoerythrin (sc-19666 PE) or fluorescein (sc-19666 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

RESEARCH USE

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

APPLICATIONS

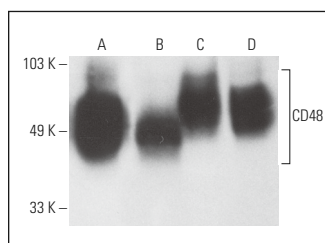
CD48 (HM48-1) is recommended for detection of CD48 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for CD48 siRNA (m): sc-35009, CD48 shRNA Plasmid (m): sc-35009-SH and CD48 shRNA (m) Lentiviral Particles: sc-35009-V.

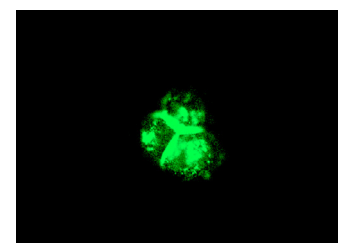
Molecular Weight of CD48: 43 kDa.

Positive Controls: BW5147 cell lysate: sc-3800, mouse thymus extract: sc-2406 or CTLL-2 cell lysate: sc-2242.

DATA



CD48 (HM48-1): sc-19666. Western blot analysis of CD48 expression in CTLL-2 (A), BW5147 (B) and I-11.13 (C) whole cell lysates and mouse thymus tissue extract (D).



CD48 (HM48-1): sc-19666. Immunofluorescence staining of methanol-fixed CTLL-2 cells showing membrane staining.

SELECT PRODUCT CITATIONS

- Wang, Z., et al. 2020. Acute myeloid leukemia immune escape by epigenetic CD48 silencing. *Clin. Sci.* 134: 261-271.

STORAGE

Store at 4° C, ****DO 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 for detailed protocols and support products.