

# CD48 (5-4.8): sc-8400

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD48 (5-4.8) is a mouse monoclonal antibody raised against human PBLs.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD48 (5-4.8) is available conjugated to agarose (sc-8400 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8400 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8400 PE), fluorescein (sc-8400 FITC), Alexa Fluor<sup>®</sup> 488 (sc-8400 AF488), Alexa Fluor<sup>®</sup> 546 (sc-8400 AF546), Alexa Fluor<sup>®</sup> 594 (sc-8400 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-8400 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-8400 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-8400 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

CD48 (5-4.8) is recommended for detection of CD48 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), flow cytometry (1 µg per 1 x 10<sup>6</sup> cells) 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.

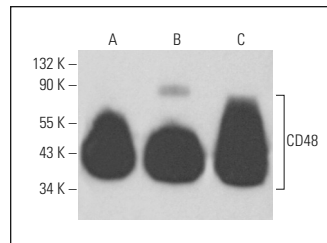
Molecular Weight of CD48: 43 kDa.

Positive Controls: IB4 whole cell lysate: sc-364780, NCI-H929 whole cell lysate: sc-364786 or NAMALWA cell lysate: sc-2234.

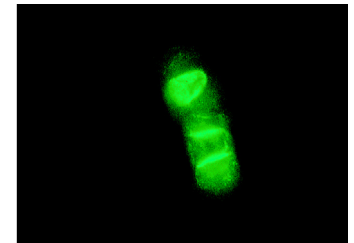
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

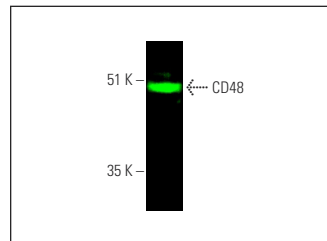
## DATA



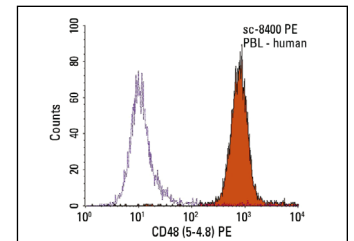
CD48 (5-4.8): sc-8400. Western blot analysis of CD48 expression in IB4 (A), NCI-H929 (B) and NAMALWA (C) whole cell lysates.



CD48 (5-4.8): sc-8400. Immunofluorescence staining of methanol-fixed Jurkat cells showing membrane localization.



CD48 (5-4.8): sc-8400. Near-infrared western blot analysis of CD48 expression in IB4 whole cell lysate. Blocked with UltraCruz<sup>®</sup> Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BPCFL 680: sc-516180.



CD48 (5-4.8) PE: sc-8400 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG<sub>2a</sub>-PE: sc-2867.

## SELECT PRODUCT CITATIONS

- Suzuki, T., et al. 2001. CD24 induces apoptosis in human B cells via the glycolipid-enriched membrane domains/rafts-mediated signaling system. *J. Immunol.* 166: 5567-5577.
- Mishra, R., et al. 2022. Transplanted allogeneic cardiac progenitor cells secrete GDF-15 and stimulate an active immune remodeling process in the ischemic myocardium. *J. Transl. Med.* 20: 323.

## 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.