

CD88 (C-19): sc-7089

BACKGROUND

CD88, also called C5a receptor (C5aR), is a 42 kDa G protein-coupled integral membrane protein. CD88 is expressed on neutrophils, monocytes, macrophages, hepatocytes and mast cells, as well as on various epithelial and endothelial cells. CD88 serves as a receptor for the inflammatory peptide C5a. The binding of C5a to CD88 has been shown to elicit increased production of acute phase proteins in liver. In brain, an increased production of CD88 has been shown to be associated with inflammation. These data indicate a role for CD88 in the inflammatory response.

REFERENCES

- Hugli, T.E. and Muller-Eberhard, H.J. 1978. Anaphylatoxins: C3a and C5a. *Adv. Immunol.* 26: 1-53.
- Gerard, N.P. and Gerard, C. 1991. The chemotactic receptor for human C5a anaphylatoxin. *Nature* 349: 614-617.
- Haviland, D.L., et al. 1995. Cellular expression of the C5a anaphylatoxin receptor (C5aR): demonstration of C5aR on nonmyeloid cells of the liver and lung. *J. Immunol.* 154: 1861-1869.
- Fureder, W., et al. 1995. Differential expression of complement receptors on human basophils and mast cells. Evidence for mast cell heterogeneity and CD88/C5aR expression on skin mast cells. *J. Immunol.* 155: 3152-3160.
- Elsner, J., et al. 1996. Detection of C5a receptors on human eosinophils and inhibition of eosinophil effector functions by anti-C5a receptor (CD88) antibodies. *Eur. J. Immunol.* 26: 1560-1564.
- Gasque, P., et al. 1997. Expression of the receptor for complement C5a (CD88) is up-regulated on reactive astrocytes, microglia, and endothelial cells in the inflamed human central nervous system. *Am. J. Pathol.* 150: 31-41.

CHROMOSOMAL LOCATION

Genetic locus: C5AR1 (human) mapping to 19q13.32.

SOURCE

CD88 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD88 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-7089 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.

RESEARCH USE

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

APPLICATIONS

CD88 (C-19) is recommended for detection of CD88 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD88 siRNA (h): sc-35031, CD88 shRNA Plasmid (h): sc-35031-SH and CD88 shRNA (h) Lentiviral Particles: sc-35031-V.

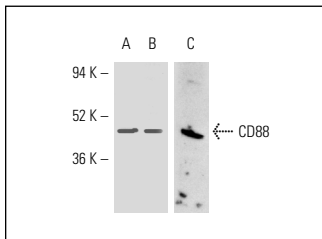
Molecular Weight of CD88: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HL-60/Mx-1 whole cell lysate or CD88 (h): 293T Lysate: sc-175352.

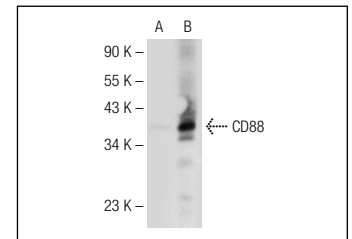
RECOMMENDED SECONDARY REAGENTS

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



Western blot analysis of CD88 expression in U-937 (A), HL-60/Mx-1 (B) and HeLa (C) whole cell lysates. Antibodies tested include CD88 (H-100): sc-25774 (A,B) and CD88 (C-19): sc-7089 (C).



CD88 (C-19): sc-7089. Western blot analysis of CD88 expression in non-transfected: sc-117752 (A) and human CD88 transfected: sc-175352 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Copsel, S., et al. 2011. Multidrug resistance protein 4 (MRP4/ABCC4) regulates cAMP cellular levels and controls human leukemia cell proliferation and differentiation. *J. Biol. Chem.* E-Published.

MONOS
Satisfaction
Guaranteed

Try **CD88 (B-6): sc-271949** or **CD88 (8D6): sc-53788**, our highly recommended monoclonal alternatives to CD88 (C-19).