

# CD88 (H-100): sc-25774

## BACKGROUND

CD88, also known as C5a receptor (C5aR), is a G protein-coupled integral membrane protein. CD88, which is expressed on neutrophils, monocytes, macrophages, hepatocytes and mast cells, as well as on various epithelial and endothelial cells, serves as a receptor for the inflammatory peptide C5a. Research studies suggest a role for CD88 in the inflammatory response. 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. Research also indicates a role for C5a/C5aR in the pathogenesis of rheumatoid arthritis, as well as a heightened responsiveness of human bronchial epithelial cells (HBECs) to C5a upon exposure of these cells to cigarette smoke and other environmental irritants.

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: C5AR1 (human) mapping to 19q13.32; C5ar1 (mouse) mapping to 7 A2.

## SOURCE

CD88 (H-100) is a rabbit polyclonal antibody raised against amino acids 251-350 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.

## APPLICATIONS

CD88 (H-100) is recommended for detection of CD88 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) 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 siRNA (m): sc-42814, CD88 shRNA Plasmid (h): sc-35031-SH, CD88 shRNA Plasmid (m): sc-42814-SH, CD88 shRNA (h) Lentiviral Particles: sc-35031-V and CD88 shRNA (m) Lentiviral Particles: sc-42814-V.

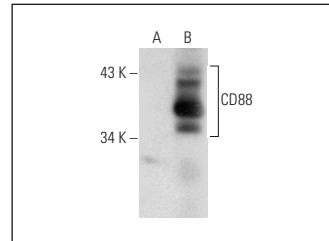
Molecular Weight of CD88: 49 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, CD88 (h): 293T Lysate: sc-175352 or U-937 cell lysate: sc-2239.

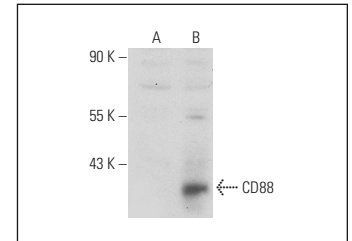
## STORAGE

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

## DATA



CD88 (H-100): sc-25774. Western blot analysis of CD88 expression in non-transfected: sc-117752 (A) and human CD88 transfected: sc-175352 (B) 293T whole cell lysates.



CD88 (H-100): sc-25774. Western blot analysis of CD88 expression in non-transfected: sc-117752 (A) and human CD88 transfected: sc-158362 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Kuan, Y.H., et al. 2005. Artocarpol A stimulation of superoxide anion generation in neutrophils involved the activation of PLC, PKC and p38 mitogen-activated PK signaling pathways. *Br. J. Pharmacol.* 145: 460-468.
- Kuan, Y.H., et al. 2005. Inhibition of phospholipase D activation by CYL-26z in formyl peptide-stimulated neutrophils involves the blockade of Rho A activation. *Biochem. Pharmacol.* 70: 901-910.
- Kuan, Y.H., et al. 2006. Activation of phosphoinositide 3-kinase and Src family kinase is required for respiratory burst in rat neutrophils stimulated with artocarpol A. *Biochem. Pharmacol.* 71: 1735-1746.
- Chen, N.J., et al. 2007. C5L2 is critical for the biological activities of the anaphylatoxins C5a and C3a. *Nature* 446: 203-207.
- Marotta, D.M., et al. 2009. Mechanisms underlying the nociceptive responses induced by platelet-activating factor (PAF) in the rat paw. *Biochem. Pharmacol.* 77: 1223-1235.
- Lara-Astiaso, D., et al. 2012. Complement anaphylatoxins C3a and C5a induce a failing regenerative program in cardiac resident cells. Evidence of a role for cardiac resident stem cells other than cardiomyocyte renewal. *Springerplus* 1: 63.
- Tsai, I.J., et al. 2015. Inhibition of Rho-associated kinase relieves C5a-induced proteinuria in murine nephrotic syndrome. *Cell. Mol. Life Sci.* 72: 3157-3171.

## RESEARCH USE

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


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Try **CD88 (B-6): sc-271949** or **CD88 (8D6): sc-53788**, our highly recommended monoclonal alternatives to CD88 (H-100).