SANTA CRUZ BIOTECHNOLOGY, INC.

# CD68 (N-19): sc-7083

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

CD68, which is homologous to the mouse antigen macrosialin, belongs to a family of acidic, highly glycosylated lysosomal glycoproteins (LGPs) that includes lamp-1 and lamp-2. CD68 is found in cytoplasmic granules and in the cytoplasm of various non-hematopoietic tissues including liver and kidney tubules and glomeruli. CD68 is also found, to a lesser extent, on the surface of macrophages, monocytes, neutrophils, basophils and large lymphocytes. LGPs are major components of lysosomal membranes and may act to protect the membranes from attack by hydrolases.

## REFERENCES


1. Pulford, K.A., et al. 1990. Distribution of the CD68 macrophage/myeloid associated antigen. Int. Immunol. 2: 973-980.
2. Fukuda, M. 1991. Lysosomal membrane glycoproteins. Structure, biosynthesis, and intracellular trafficking. J. Biol. Chem. 266: 21327-21330.
3. Holness, C.L. and Simmons, D.L. 1993. Molecular cloning of CD68, a human macrophage marker related to lysosomal glycoproteins. Blood 81: 1607-1613.


## CHROMOSOMAL LOCATION

Genetic locus: CD68 (human) mapping to 17p13.1.

## SOURCE

CD68 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD68 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-7083 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as fluorescein conjugate for immunofluorescence, sc-7083 FITC, 200 µg/1 ml.

## APPLICATIONS

CD68 (N-19) is recommended for detection of CD68 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).

CD68 (N-19) is also recommended for detection of CD68 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CD68 siRNA (h): sc-35019, CD68 shRNA Plasmid (h): sc-35019-SH and CD68 shRNA (h) Lentiviral Particles: sc-35019-V.

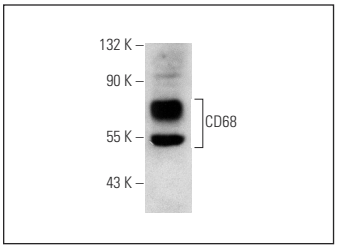
Molecular Weight of CD68: 75-110 kDa.

Positive Controls: THP-1 cell lysate: sc-2238.

## STORAGE

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

## DATA




CD68 (N-19): sc-7083. Western blot analysis of CD68 expression in THP-1 whole cell lysate.

## SELECT PRODUCT CITATIONS


1. Yawalkar, N., et al. 2000. Down-regulation of IL-12 by topical corticosteroids in chronic atopic dermatitis. J. Allergy Clin. Immunol. 106: 941-947.
2. Maestrelli, P., et al. 2001. Increased expression of heme oxygenase (HO)-1 in alveolar spaces and HO-2 in alveolar walls of smokers. Am. J. Respir. Crit. Care Med. 164: 1508-1513.
3. Maestrelli, P., et al. 2003. Decreased haem oxygenase-1 and increased inducible nitric oxide synthase in the lung of severe COPD patients. Eur. Respir. J. 21: 971-976.
4. Mark, W., et al. 2003. Sinomenine blocks tissue remodeling in a rat model of chronic cardiac allograft rejection. Transplantation 75: 940-945.
5. Hassan, A.S., et al. 2005. Lacrimal gland involvement in graft-versus-host disease: a murine model. Invest Ophthalmol. Vis. Sci. 46: 2692-2697.
6. Eugenin, E.A., et al. 2008. Human immunodeficiency virus (HIV) infects human arterial smooth muscle cells *in vivo* and *in vitro:* implications for the pathogenesis of HIV-mediated vascular disease. Am. J. Pathol. 172: 1100-1111.


## RESEARCH USE

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

## PROTOCOLS

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