

# CD68 (C-18): sc-7082

## BACKGROUND

CD68, which is homologous to the mouse antigen macrophage, 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.
4. Ramprasad, M.P., et al. 1995. The 94- to 97-kDa mouse macrophage membrane protein that recognizes oxidized low density lipoprotein and phosphatidyl-serine-rich liposomes is identical to macrophage, the mouse homologue of human CD68. *Proc. Natl. Acad. Sci. USA* 92: 9580-9584.
5. Strobl, H., et al. 1995. Flow cytometric analysis of intracellular CD68 molecule expression in normal and malignant haemopoiesis. *Br. J. Haematol.* 90: 774-782.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD68 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-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-7082 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

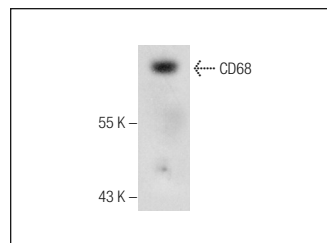
CD68 (C-18) is recommended for detection of CD68 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 highly glycosylated protein: 75-110 kDa.

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

## DATA



CD68 (C-18): sc-7082. Western blot analysis of CD68 expression in THP-1 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Znoyko, I., et al. 2005. Expression of oncostatin M and its receptors in normal and cirrhotic human liver. *J. Hepatol.* 43: 893-900.
2. Benencia, F., et al. 2005. HSV oncolytic therapy upregulates interferon-inducible chemokines and recruits immune effector cells in ovarian cancer. *Mol. Ther.* 12: 789-802.
3. Montgomery, J.D., et al. 2006. Detection of human herpesvirus 8 (HHV-8) in normal prostates. *Prostate* 66: 1302-1310.
4. Gray, E., et al. 2008. Elevated myeloperoxidase activity in white matter in multiple sclerosis. *Neurosci. Lett.* 444: 195-198.
5. Zong, M., et al. 2012. Effects of immunosuppressive treatment on interleukin-15 and interleukin-15 receptor  $\alpha$  expression in muscle tissue of patients with polymyositis or dermatomyositis. *Ann. Rheum. Dis.* 71: 1055-1063.
6. Whitcomb, D.C., et al. 2012. Common genetic variants in the CLDN2 and PRSS1-PRSS2 loci alter risk for alcohol-related and sporadic pancreatitis. *Nat. Genet.* 44: 1349-1354.



Try **CD68 (KP1): sc-20060** or **CD68 (E-11): sc-17832**, our highly recommended monoclonal alternatives to CD68 (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD68 (KP1): sc-20060**.