

# CD68 (T-16): sc-5474

## 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., et al. 1993. Molecular cloning of CD68, a human macrophage marker related to lysosomal glycoproteins. *Blood* 81: 1607-1613.
4. 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 (mouse) mapping to 11 B3.

## SOURCE

CD68 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD68 of mouse 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-5474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CD68 (T-16) is recommended for detection of CD68 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (m): sc-35020, CD68 shRNA Plasmid (m): sc-35020-SH and CD68 shRNA (m) Lentiviral Particles: sc-35020-V.

Molecular Weight of CD68 highly glycosylated protein: 75-110 kDa.

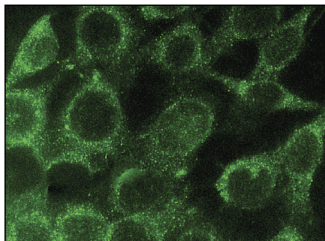
## STORAGE

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.

## DATA



CD68 (T-16): sc-5474. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

## SELECT PRODUCT CITATION

1. Choda, Y., et al. 2004. Failure of the gut barrier system enhances liver injury in rats: protection of hepatocytes by gut-derived hepatocyte growth factor. *Eur. J. Gastroenterol. Hepatol.* 16: 1017-1025.
2. Takata, Y., et al. 2005. Transcriptional repression of ATP-binding cassette transporter A1 gene in macrophages: a novel atherosclerotic effect of Angiotensin II. *Circ. Res.* 97: e88-e96.
3. Miyaso, H., et al. 2005. Obstructive jaundice increases sensitivity to lipopolysaccharide via TLR4 upregulation: possible involvement in gut-derived hepatocyte growth factor-protection of hepatocytes. *J. Gastroenterol. Hepatol.* 20: 1859-1866.
4. Bennouna, S., et al. 2005. Microbial antigen triggers rapid mobilization of TNF- $\alpha$  to the surface of mouse neutrophils transforming them into inducers of high-level dendritic cell TNF- $\alpha$  production. *J. Immunol.* 174: 4845-4851.
5. Yamaguchi, K., et al. 2006. *In vivo* selection of transduced hematopoietic stem cells and little evidence of their conversion into hepatocytes *in vivo*. *J. Hepatol.* 45: 681-687.
6. Gebhardt, C., et al. 2008. RAGE signaling sustains inflammation and promotes tumor development. *J. Exp. Med.* 205: 275-285.
7. Le Poole, I.C., et al. 2008. Langerhans cells and dendritic cells are cytotoxic towards HPV16 E6 and E7 expressing target cells. *Cancer Immunol. Immunother.* 57: 789-797.



Try **CD68 (KP1): sc-20060** or **CD68 (E-11): sc-17832**, our highly recommended monoclonal alternatives to CD68 (T-16). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **CD68 (KP1): sc-20060**.