

# CD68 (6A324): sc-70760

## 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. Ramprasad, M.P., et al. 1995. The 94 to 97 kDa mouse macrophage membrane protein that recognizes oxidized low density lipoprotein and phosphatidylserine-rich liposomes is identical to macrophage, the mouse homologue of human CD68. *Proc. Natl. Acad. Sci. USA* 92: 9580-9584.

## CHROMOSOMAL LOCATION

Genetic locus: Cd68 (mouse) mapping to 11 B3.

## SOURCE

CD68 (6A324) is a mouse monoclonal antibody raised against spleen cells of rat origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CD68 (6A324) is recommended for detection of CD68 of mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

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.

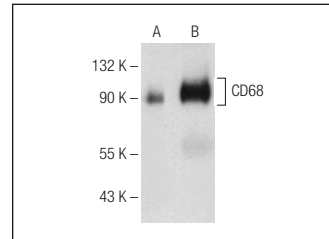
Molecular Weight of highly glycosylated protein CD68: 75-110 kDa.

Positive Controls: rat spleen extract: sc-2397 or rat PBL whole cell lysate.

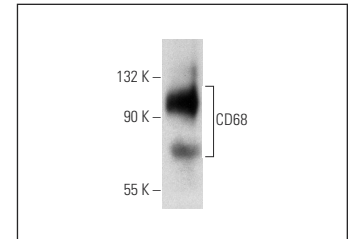
## STORAGE

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

## DATA



CD68 (6A324): sc-70760. Western blot analysis of CD68 expression in rat PBL whole cell lysate (A) and rat spleen tissue extract (B).



CD68 (6A324): sc-70760. Western blot analysis of CD68 expression in rat spleen tissue extract (B).

## SELECT PRODUCT CITATIONS

1. Potula, H.S., et al. 2009. Src-dependent STAT-3-mediated expression of monocyte chemoattractant protein-1 is required for 15(S)-hydroxyeicosate-traenoic acid-induced vascular smooth muscle cell migration. *J. Biol. Chem.* 284: 31142-31155.
2. Roy, D.N., et al. 2011. Combination therapy with andrographolide and δ-penicillamine enhanced therapeutic advantage over monotherapy with δ-penicillamine in attenuating fibrogenic response and cell death in the periportal zone of liver in rats during copper toxicosis. *Toxicol. Appl. Pharmacol.* 250: 54-68.
3. Yu, J., et al. 2011. Vitamin E ameliorates iodine-induced cytotoxicity in thyroid. *J. Endocrinol.* 209: 299-306.
4. Shukla, P.K., et al. 2016. Chronic ethanol feeding promotes azoxymethane and dextran sulfate sodium-induced colonic tumorigenesis potentially by enhancing mucosal inflammation. *BMC Cancer* 16: 189.

## 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) for detailed protocols and support products.



See **CD68 (KP1): sc-20060** for CD68 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluorv 647.