

CD68 (H-255): sc-9139

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.

CHROMOSOMAL LOCATION

Genetic locus: CD68 (human) mapping to 17p13.1; Cd68 (mouse) mapping to 11 B3.

SOURCE

CD68 (H-255) is a rabbit polyclonal antibody raised against amino acids 100-354 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.

APPLICATIONS

CD68 (H-255) is recommended for detection of CD68 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 CD68 siRNA (h): sc-35019, CD68 siRNA (m): sc-35020, CD68 shRNA Plasmid (h): sc-35019-SH, CD68 shRNA Plasmid (m): sc-35020-SH, CD68 shRNA (h) Lentiviral Particles: sc-35019-V and CD68 shRNA (m) Lentiviral Particles: sc-35020-V.

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

Positive Controls: THP-1 cell lysate: sc-2238 or CD68 (h): 293T Lysate: sc-175248.

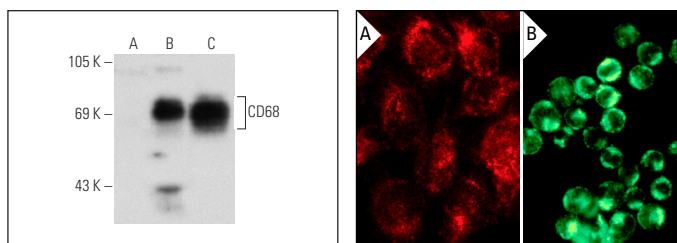
STORAGE

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 (H-255): sc-9139. Western blot analysis of CD68 expression in non-transfected 293T: sc-117752 (A), human CD68 transfected 293T: sc-175248 (B) and THP-1 (C) whole cell lysates.

CD68 (H-255): sc-9139. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization (A,B).

SELECT PRODUCT CITATIONS

1. Li, J., et al. 2005. Expression analysis of PMP22/Gas3 in premalignant and malignant pancreatic lesions. *J. Histochem. Cytochem.* 53: 885-893.
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. Wendum, D., et al. 2005. Cytoplasmic phospholipase A₂ α overexpression in stromal cells is correlated with angiogenesis in human colorectal cancer. *Mod. Pathol.* 18: 212-220.
4. Reddy, N.M., et al. 2009. Disruption of Nrf2 impairs the resolution of hyperoxia-induced acute lung injury and inflammation in mice. *J. Immunol.* 182: 7264-7271.
5. Brantley, E.C., et al. 2010. Nitric oxide-mediated tumoricidal activity of murine microglial cells. *Transl. Oncol.* 3: 380-388.
6. Murai, K., et al. 2010. Primary immune system responders to nucleus pulposus cells: evidence for immune response in disc herniation. *Eur. Cell. Mater.* 19: 13-21.
7. Leu, J.G., et al. 2012. The effects of gold nanoparticles in wound healing with antioxidant epigallocatechin gallate and α-lipoic acid. *Nanomedicine* 8: 767-775.
8. Paepe, B.D., et al. 2012. Heat shock protein families 70 and 90 in Duchenne muscular dystrophy and inflammatory myopathy: balancing muscle protection and destruction. *Neuromuscul. Disord.* 22: 26-33.



Try **CD68 (KP1): sc-20060** or **CD68 (E-11): sc-17832**, our highly recommended monoclonal alternatives to CD68 (H-255). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CD68 (KP1): sc-20060**.