**BACKGROUND**

CD68, which is homologous to the mouse antigen macroialin, 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 hydrolyases.

**CHROMOSOMAL LOCALIZATION**

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

**SOURCE**

CD68 (KP1) is a mouse monoclonal antibody raised against a subcellular fraction of human alveolar macrophages.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD68 (KP1) is available conjugated to agarose (sc-20060 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-20060 PE), fluorescein (sc-20060 FITC), Alexa Fluor® 488 (sc-20060 AF488), Alexa Fluor® 546 (sc-20060 AF546), Alexa Fluor® 594 (sc-20060 AF594) or Alexa Fluor® 647 (sc-20060 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-20060 AF680) or Alexa Fluor® 790 (sc-20060 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, CD68 (KP1) is available conjugated to either PerCP (sc-20060 PerCP), PerCP-Cy5.5 (sc-20060 PCPC5) or Alexa Fluor® 405 (sc-20060 AF405), 100 tests in 2 ml, for IF, IHC(P) and FCM.

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**APPLICATIONS**

CD68 (KP1) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

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.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**APPLICATION**

CD68 (KP1): sc-20060. Western blot analysis of CD68 expression in K-562 (A), U-937 (B) and AML-193 (C) whole cell lysates.

CD68 (KP1): sc-20060. Immunofluorescence staining of methanol-fixed THP-1 cells showing cytoplasmic and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of subset of cells in red pulp (B).

**RESEARCH USE**

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