

Anti-CD68 [FA-11] Standard Size Ab01113-1.32

This antibody has a D265A mutation affecting Fc receptor engagement.

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1-D265A, Fc Silenced, Kappa

Clone Number: FA-11

Alternative Name(s) of Target: Macrosialin; FA/11; FA11 antigen

UniProt Accession Number of Target Protein: P31996

Published Application(s): IP, FC, IHC **Published Species Reactivity:** Mouse

Immunogen: This antibody was raised by immunising rats (AO x Lou strain) with murine macrosialin (MS). **Specificity:** This antibody is specific for murine CD68, known also as macrosialin (MS). CD68 is a 110 kDa, heavily O- and N- glycosylated type I integral membrane protein belonging to the sialomucin family and is closely related to the lysosomal/endosomal-associated membrane glycoproteins (LAMP). CD68 is predominantly expressed on the intracellular lysomsomes of monocytes and macrophages and to a lesser extent by dendritic cells and peripheral blood granulocytes. Elevated expression of CD68 has been demonstrated on CD34+ cells in various human malignancies, including several acute myeloid leukemia studies.

Application Notes: When it was first generated, this antibody was used in binding assays, immunoprecipitation (IP) and immunofluorescence (IF) to study the differential expression of murine macrophage surface glycoprotein antigens in intracellular membranes (Smith et al., 1987). Subsequently, this antibody has been utilised in numerous FACS, IP, IHC, ICC/IF, WB applications, for instance, to delineate the roles of mouse and human CD68 as macrophage receptors for oxidised low density lipoprotein (Ramprasad et al., 1996), to indicate that mice unresponsive to granulocyte-macrophage colony-stimulating factor (GM-CSF) are unexpectedly resistant to cutaneous Leishmania major infection (Scott et al., 2000), to characterise the macrophage subsets harbouring Leishmania donovani in spleens of infected BALB/c mice (Lang et al., 2000), and to examine the role of Foxp3(+) Tregs in Alzheimer's disease (Baruch et al., 2015).

Antibody First Published in: Smith et al. Differential expression of murine macrophage surface glycoprotein antigens in intracellular membranes. J Cell Sci. 1987 Feb;87 (Pt 1):113-9. PMID:3312248 **Note on publication:** Describes the original generation of this antibody and its subsequent applications in

binding assays, immunoprecipitation and immunofluorescence to study the differential expression of murine macrophage surface glycoprotein antigens in intracellular membranes.

Product Form

Size: 100 µg Purified antibody.

Purification: Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.