

Anti-CD68 [Y1/82A] Standard Size Ab01335-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors. Developed in partnership with Ximbio (www.ximbio.com).

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, [Fc Silent™](#), Kappa

Clone Number: Y1/82A

Alternative Name(s) of Target: Macrosialin; Gp110; DKFZp686M18236; SCARD1; scavenger receptor class D, member 1; SRD1; SR-D1; CD68 molecule; CD68 antigen; Macrophage Antigen CD68

UniProt Accession Number of Target Protein: P34810

Published Application(s): FACS, WB, IF, IHC

Published Species Reactivity: Human

Immunogen: This antibody was raised by immunising BALB/c mouse with phytohaemagglutinin stimulated blasts.

Specificity: This antibody recognises human CD68 antigen. The Y1/82A antibody recognises an epitope distinct from those of antibody clones Y2/131, EBM11, Ki-M6 and KP1. Y1/82A is reportedly more specific for monocytes and macrophages than KP1. Its antigen, CD68 is a membrane glycoprotein highly expressed in monocytes and macrophages. It is involved in phagocytosis, lysosomal metabolism and interactions with pathogens and other cells.

Application Notes: This antibody was demonstrated to react with peripheral blood and bone marrow monocytes and resident macrophages in all tissues tested and was also able to characterise certain leukemias (Davey et al., 1988). Furthermore, it was proposed that Y1/82A may be useful in the diagnosis of monocytic leukaemias and histiocytic neoplasms as well as in the detection of macrophages in various diseases (Davey et al., 1988). For instance, one group utilised it during flow cytometric description of the expression of various surface markers on 1A1 and C06 cells in a study on microglia during HIV infection (Garcia-Mesa et al., 2017). Similarly, another group used this antibody to characterise vesicle cells during Varicella-Zoster Virus infection (Carpenter et al., 2011).

Antibody First Published in: Davey et al. Monoclonal antibody (Y1/82A) with specificity towards peripheral blood monocytes and tissue macrophages. J Clin Pathol. 1988 Jul;41(7):753-8. [PMID:2457604](#)

Note on publication: This article describes generation and characterisation of Y1/82A antibody.

Product Form

Size: 200 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.