

Anti-CD68 [Y1/82A] mAb

Catalogue number: 151370

Sub-type: Primary antibody

Images:

Contributor

Inventor: Jacqueline Cordell

Institute: University of Oxford

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CD68 [Y1/82A] mAb

Alternate name: CD68 Molecule; CD68 Antigen; Macrophage Antigen CD68; GP11; Scavenger Receptor Class D; Member; Scavenger Receptor Class D; SCARD1; LAMP4

Class: Monoclonal

Conjugate: Unconjugated

Description: Monoclonal antibody directed against CD68, which can aid diagnosis of monocytic leukaemia's and histiocytic neoplasms and help identify macrophages in tissues from various inflammatory and neoplastic disease states.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG2a

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Lysosomal contents of lung macrophages

Immunogen UNIPROT ID: P34810

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: CD68

Target alternate names:

Target background: CD68 is a 110 kD glycoprotein, also known as macrosialin, belonging to the sialomucin family. It is closely related to the family of acidic, highly glycosylated lysosomal-associated membrane proteins (LAMPs). CD68 is predominately expressed in cytoplasmic granules of monocytes/macrophages, dendritic cells, and granulocytes. It is one of the useful myeloid cell markers. Further studies have shown that CD68 is also expressed by a subset of hematopoietic progenitors, T cells, NK cells, LAK cells, subset of B cells, fibroblasts, and endothelial cells. The biological function of CD68 is still unknown. Anti-CD68 (Y1/82A) reacted with peripheral blood and bone marrow monocytes and resident macrophages in all tissues tested. Anti-CD68 did not react with other cell types, apart from some osteoclasts and megakaryocytes. This antibody was shown to be useful in characterising monocytic leukaemia's, histiocytic neoplasms and detecting macrophages in disease.

Molecular weight:

Ic50:

Applications

Application: FACS ; IHC ; IF ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: Store at -20° C frozen. Avoid repeated freeze / thaw cycles

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Fovet et al. 2019. EBioMedicine. 47:492-505. PMID: 31492559. ; Malissen et al. 2019. Oncoimmunology. 8(12):e1665976. PMID: 31741766. ; MacGregor et al. 2019. Oncoimmunology. 8(12):e1665460. PMID: 31741762. ; Kothari et al. 2018. Brain Pathol. 28(6):806-821. PMID: 30062819. ; Fodil et al. 2017. Nat Commun. 8(1):932. PMID: 29030607. ; Wen et al. 2017. Cell Death Dis. 8(2):e2593. PMID: 28151470. ; Adipocytes activate mitochondrial fatty acid oxidation and autophagy to promote tumor growth in colon cancer. ; Hyafil et al. 2016. J Nucl Med. :. PMID: 27789718. ; Imaging the Cytokine Receptor CXCR4 in Atherosclerotic Plaques with the Radiotracer 68Ga-Pentixafor for PET. ; Tissue factor-bearing microparticles and CA19.9: two players in pancreatic cancer-associated thrombosis? ; Woei-A-Jin et al. 2016. Br J Cancer. :. PMID: 27404454. ; Sugimoto et al. 2016. J Clin Exp Hematop. 56(1):1-19. PMID: 27334853. ; Karamese et al. 2016. Immunopharmacol Immunotoxicol. 38(3):228-37. PMID: 27144896. ; Anti-oxidant and anti-inflammatory effects of apigenin in a rat model of sepsis: an immunological, biochemical, and histopathological study. ; a4-Integrin Antibody Treatment Blocks Monocyte/Macrophage Traffic to, Vascular Cell Adhesion Molecule-1 Expression in, and Pathology of the Dorsal Root Ganglia in an SIV Macaque Model of HIV-Peripheral Neuropathy. ; Lakritz et al. 2016. Am J Pathol. :. PMID: 27157989. ; Armstrong et al. 2016. Oncotarget. 7(7):7885-98. PMID: 26799286. ; PTEN deficiency promotes macrophage infiltration and hypersensitivity of prostate cancer to IAP antagonist/radiation combination therapy. ; Follicular Lymphoma: The Role of the Tumor Microenvironment in Prognosis. ; Liu et al. 2015. Medicine (Baltimore). 94(39):e1631. PMID: 26426650. ; Tumor-Infiltrating Immune Cells Are Associated With Prognosis of Gastric Cancer. ; Lakritz et al. 2015. Am J Pathol. :. PMID: 25956030. ; Monocyte Traffic, Dorsal Root Ganglion Histopathology, and Loss of Intraepidermal Nerve Fiber Density in SIV Peripheral Neuropathy. ; Zhou et al. 2013. Proc Natl Acad Sci U S A. 110(46):E4335-44. PMID: 24167262. ; Fibrinogen-specific antibody induces abdominal aortic aneurysm in mice through complement lectin pathway activation. ; Chamberlain et al. 2013. PLoS One. 8(8):e71631. PMID: 23936523. ; Interleukin expression after injury and the effects of interleukin-1 receptor antagonist. ; Kunisch et al. 2004. Ann Rheum Dis. 63(7):774-84. PMID: 15194571. ; Macrophage specificity of three anti-CD68 monoclonal antibodies (KP1, EBM11, and PGM1) widely used for immunohistochemistry and flow cytometry. ; Doussis et al. 1993. J Clin Pathol. 46(4):334-6. PMID: 7684403. ; CD68 reactivity of non-macrophage derived tumours in cytological specimens. ; Pulford et al. 1990. Int Immunol. 2(10):973-80. PMID: 2078523. ; Distribution of the CD68 macrophage/myeloid associated antigen. ; Micklem et al. 1989. Br J Haematol. 73(1):6-11. PMID: 2803980. ; A human macrophage-associated antigen (CD68) detected by six different monoclonal antibodies. ; Pulford et al. 1989. J Clin Pathol. 42(4):414-21. PMID: 2654191. ; KP1: a new monoclonal antibody that detects a monocyte/macrophage associated antigen in routinely processed tissue sections.