

Mouse anti-Human CD68 Antibody | anti-CD68 antibody

Anti-Hu CD68 PE-Cy7

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129343	Mouse	Human	Flow Cytometry, Functional Assay

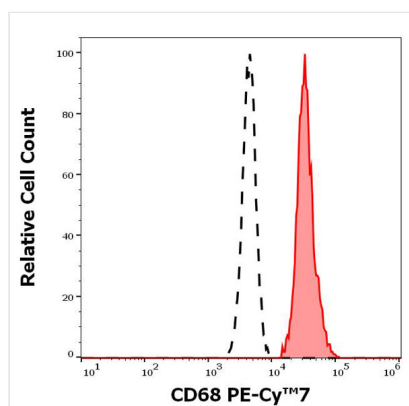
PRODUCT SYNONYMS

CD68; Anti-Hu CD68 PE-Cy7; CD68 molecule; GP110; LAMP4; SCARD1; anti-CD68 antibody

PRODUCT SPECIFICATIONS

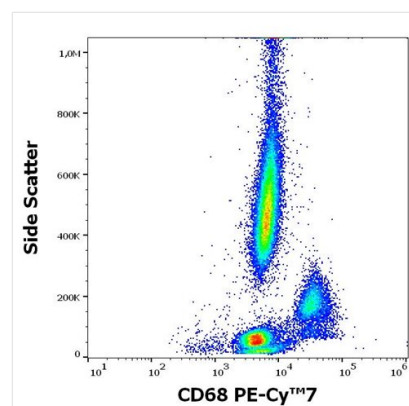
Host	Mouse
Reactivity	Human
Isotype	Mouse IgG2b
Clone Number	Y1/82A
Specificity	The mouse monoclonal antibody Y1/82A recognizes CD68 (LAMP4), a 110 kDa glycoprotein expressed mainly in cytoplasmic granules of monocytes/macrophages, granulocytes, and dendritic cells.
Purity/Purification	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Applicable Applications for anti-CD68 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Lysosomal contents of lung macrophages
Conjugation	PE-Cy7
Preparation and Storage	Store at 2-8 degree C. Protect from prolonged exposure to light. Do not freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human CD68 (Y1/82A) PE-Cy7 antibody (4ul reagent/100ul of peripheral whole blood).



FCM/FACS (Flow Cytometry)

Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human CD68 (Y1/82A) PE-Cy7 antibody (4ul reagent/100ul of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD68 antibody	CD68 (also known as LAMP4 or SCARD1) is a 110 kDa type I transmembrane glycoprotein of the lysosomal/endosomal-associated membrane glycoprotein (LAMP) family and the scavenger receptor family. Although CD68 primarily localizes to lysosomes and endosomes, its fraction circulates to the cell surface. By the heavily glycosylated extracellular domain CD68 binds to tissue- and organ-specific lectins or selectins. It is expressed mainly in cytoplasmic granules of monocytes/macrophages, granulocytes, and dendritic cells, but also e.g. in a proportion of epithelial tumours (identification of poorly differentiated neoplasms).
References	*Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr;46(4):334-6., URL: http://www.ncbi.nlm.nih.gov/pubmed/7684403,*Ulanova M, Tarkowski A, Hahn-Zoric M, Hanson LA: The Common vaccine adjuvant aluminum hydroxide up-regulates accessory properties of human monocytes via an interleukin-4-dependent mechanism. Infect Immun. 2001 Feb;69(2):1151-9., URL: http://www.ncbi.nlm.nih.gov/pubmed/11160013 ,*Mack CL, Tucker RM, Sokol RJ, Karrer FM, Kotzin BL, Whittington PF, Miller SD: Biliary atresia is associated with CD4+ Th1 cell-mediated portal tract inflammation. Pediatr Res. 2004 Jul;56(1):79-87., URL: http://www.ncbi.nlm.nih.gov/pubmed/?term=sokol+rj+miller+sd ,*I A Doussis, K C Gatter, and D Y Mason: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 April; 46(4): 334–336. , URL: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC501214,*Yamagami S, Yokoo S, Amano S, Ebihara N: Characterization of bone marrow derived cells in the substantia propria of the human conjunctiva. Invest Ophthalmol Vis Sci. 2007 Oct;48(10):4476-81., URL: http://www.ncbi.nlm.nih.gov/pubmed/17898268 ,*Holness CL, Simmons DL: Molecular cloning of CD68, a human macrophage marker related to lysosomal glycoproteins. Blood. 1993 Mar 15;81(6):1607-13., URL: http://www.ncbi.nlm.nih.gov/pubmed/7680921 ,*Quardokus EM, Saunders DC, McDonough E, Hickey JW, Werlein C, Surrette C, Rajbhandari P, Martinez Casals A, Tian H, Lowery L, Neumann EK, Bjorklund F, Neelakantan TV, Croteau J, Wiblin AE, Fisher J, Livengood AJ, Dowell KG, Silverstein JC, Spraggins JM, Pryhuber GS, Deutsch G, Ginty F, Nolan GP, Melov S, Jonigk D, Caldwell MA, Vlachos IS, Mueller W, Gehlenborg N, Stockwell BR, Lundberg E, Snyder MP, Germain RN, Camarillo JM, Kelleher NL, Borner K, Radtke AJ: Organ mapping antibody panels: a community resource for standardized multiplexed tissue imaging. Nat Methods 2023 Aug;20(8):1174-1178. doi: 10.1038/s41592-023-01846-7., URL: https://pubmed.ncbi.nlm.nih.gov/37468619/,

NCBI AND UNIPROT INFORMATION

NCBI GI #	298665
NCBI GeneID	968
UniProt Accession #	P34810; Q53HR6; Q53XI3; Q96BI7; B4DVT4
Molecular Weight	37,408 Da
NCBI Official Full Name	CD68
NCBI Official Synonym Full Names	CD68 molecule
NCBI Official Symbol	CD68
NCBI Official Synonym Symbols	GP110; LAMP4; SCARD1
NCBI Protein Information	macrosialin; CD68 antigen; macrophage antigen CD68; scavenger receptor class D, member 1
UniProt Protein Name	Macrosialin
UniProt Gene Name	CD68
UniProt Entry Name	CD68_HUMAN

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