

1P-749-T100

## Monoclonal Antibody to CD68 Phycoerythrin (PE) conjugated (100 tests)

Clone: Y1/82A

**Isotype:** Mouse IgG2b

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.

Regulatory Status: RUO

**Immunogen:** Lysosomal contents of lung macrophages

Species Reactivity: Human

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

10  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10 $^{\circ}$  cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: 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 (diagnosis of poorly differentiated neoplasms).



## PRODUCT DATA SHEET

## References:

\*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.

\*Mack CL, Tucker RM, Sokol RJ, Karrer FM, Kotzin BL, Whitington PF, Miller SD: Biliary atresia is associated with CD4+ Th1 cell-mediated portal tract inflammation. Pediatr Res. 2004 Jul;56(1):79-87.

\*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.

\*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.

\*Holness CL, Simmons DL: Molecular cloning of CD68, a human macrophage marker related to lysosomal glycoproteins. Blood. 1993 Mar 15;81(6):1607-13. \*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.

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