

## PRODUCT INFORMATION SHEET

### Monoclonal antibodies detecting human antigens

#### CD68

PURE	<span style="border: 1px solid black; padding: 2px;">RUO</span>	<span style="border: 1px solid black; padding: 2px;">REF</span>	IQP-641P	▽ 100 test
R-PE	<span style="border: 1px solid black; padding: 2px;">RUO</span>	<span style="border: 1px solid black; padding: 2px;">REF</span>	IQP-641R	▽ 100 test

RUO **For Research Use Only**



#### Description

**Clone** Y1/82A

**Isotype** Murine 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.

**Species** Human

**Immunogen** Lysosomal contents of lung macrophages.

**Summary** 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).

**Applications** FC, IHC(F). Determining optimal working dilutions by titration test.

#### Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent performance can be affected by the use of anticoagulants.



#### Handling and Storage

Antibodies are supplied in phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4. Store the vials at 2-8°C. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

#### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

#### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

**Warning** All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

### References

1. 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.
2. 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.
3. 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&#8211;336.
4. 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.
5. Holness CL, Simmons DL: Molecular cloning of CD68, a human macrophage marker related to lysosomal glycoproteins. Blood. 1993 Mar 15;81(6):1607-13.
6. 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.

### Explanation of used symbols

	Consult instructions for use
	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	For Research Use Only
	Batch code
	Use by yyyy-mm-dd
	Manufacturer

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



IQ Products BV  
Rozenburglaan 13a  
9727 DL Groningen, The Netherlands

 +31 (0)50 57 57 000  
 +31 (0)50 57 57 002  
 Technical [marketing@iqproducts.nl](mailto:marketing@iqproducts.nl)  
 Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)  
 [www.iqproducts.nl](http://www.iqproducts.nl)