

PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

CD163

PURE	ASR	REF	IQP-570P	▼	100 tests
FITC	ASR	REF	IQP-570F	▼	100 tests
R-PE	ASR	REF	IQP-570R	▼	100 tests
Biotin	ASR	REF	IQP-570B	▼	100 tests

ASR Analyte Specific Reagent, analytical and performance characteristics are not established. The product comply with the ASR definitions of the U.S. Food & Drug Administration (FDA).



Description

Clone

MAC2-158

Isotype

Murine IgG1

Specificity

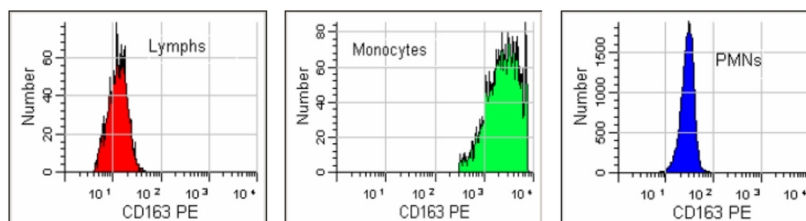
The CD163 antigen is the cysteine-rich human scavenger receptor protein (p155, M130) found on mononuclear phagocytes, monocytes, and macrophages. CD163 is up-regulated on mononuclear phagocytes by IL-4, IL-6 and dexamethasone and serves as a receptor for the hemoglobin / haptoglobin complex. Expression of CD163 is restricted to cells of monocyte lineage and increases as the monocytes mature into macrophages. CD163 is present on all CD14⁺ monocytes, most CD64⁺ monocytes, and demonstrates higher expression on CD16⁺ monocytes. Stimulation of monocytes and macrophages by lipopolysaccharide (LPS), IL-10, and tumor necrosis factor alpha (TNF- α) causes shedding of CD163 from the cell surface into plasma or supernatant.

Applications

Flow Cytometry, ELISA, Fluorescent Microscopy, Western blot, Immunohistochemistry.

Representative data

Staining with clone MAC2-158 (CD163) monoclonal antibodies is illustrated by flow cytometry analysis of blood cells. Direct staining was performed using 10 μ l of the PE-conjugated antibody and 100 μ l of blood sample.



Handling and Storage

Antibodies are supplied either as 100 tests per vial (1 ml) for singles. They are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.2% BSA, 0.09% sodiumazide (NaN₃). Store the vials at 2-8 °C. Monoclonal antibodies should be protected from prolonged exposure to light. 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. Representative flow cytometric data is included in this data sheet.












Warning

All products contain sodium azide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

- 1 U.S. Patent #5,077,216: "Monoclonal antibodies specific for a human mononuclear phagocyte-specific antigen" by Morganelli PM and Guyre PM; December 31, 1991.
- 2 Buechler C, Ritter M, Orso E, Langmann T, Klucken J, Schmitz G: Regulation of scavenger receptor CD163 expression in human monocytes and macrophages by pro- and anti-inflammatory stimuli. *J Leukoc Biol* 67:97-102, 2000.
- 3 Morganelli PM and Guyre PM: INF- γ plus glucocorticoids stimulate the expression of a newly identified human mononuclear phagocyte-specific antigen. *J Immunol* 140, 2296, 1988.
- 4 Pulford K, Micklem K, Law S, Mason D: CD163 (M130 antigen) workshop panel report. In: T. Kishimoto, H. Kikutani, A. von dem Borne, S. Goyert, D. Mason, M. Miyasaka, L. Moretta, K. Omumura, S. Shaw, T. Springer, K. Sugamura and H. Zola (Eds), *Leukocyte Typing VI*. Garland Publishing, New York, p. 1089-91, 1998.
- 5 Sulahian, TH, Hogger P, Wahner AE, Wardwell K, Goulding NJ, Sorg C, Droste A, Stehling M, Wallace PK, Morganelli PM, Guyre PM: Human monocytes express CD163m, which is upregulated by IL-10 and identical to p155. *Cytokine* 12:1312-21, 2000.
- 6 Möller HJ and Moestrup SK: CD163: a regulated hemoglobin scavenger receptor with a role in the anti-inflammatory response. *Ann Med* 36:347-354, 2004.
- 7 Madsen M, Möller HJ, Nielsen MJ, Jacobsen C, Graversen JH, van den Berg T, Moestrup SK: Molecular characterization of the haptoglobin-hemoglobin receptor CD163. *J Biol Chem* 279:51561-67, 2004.
- 8 Davis BH and Zarev PV: Human monocyte CD163 expression inversely correlates with soluble CD163 plasma levels. *Cytometry*, 63:16-22, 2005.
- 9 Lau SK, Chu PG, Weiss LM: CD163 A specific marker of macrophages in paraffin-embedded tissue samples. *Am J Clin Pathol* 122:794-801, 2004.
- 10 Manieckia MB, Etzerodt A, Moestrup SK, Møller HJ, Graversen JH: Comparative assessment of the recognition of domain-specific CD163 monoclonal antibodies in human monocytes explains wide discrepancy in reported levels of cellular surface CD163 expression. *Immunobiology*, 216:882-90, 2011.

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)
	Analyte Specific Reagent
	Batch code
	Use by yyyy-mm-dd
	Manufacturer



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