



**BMA BIOMEDICALS**

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**Monoclonal Antibody To Human CD163**  
**Haemoglobin-Haptoglobin Receptor, Scavenger Receptor**

Monoclonal antibody 5C6 FAT recognizes a membrane glycoprotein on human monocytes and macrophages which is expressed in intermediate and late inflammatory stages. CD163 is a scavenger receptor for the haemoglobin-haptoglobin complex, and is upregulated by glucocorticoids and IL-10. The extracellular portion of the receptor is regularly shed and can be found in the circulation (see also our product S-1015, sCD163 ELISA). An important function of CD163 seems to be in the adhesion of monocytes to activated endothelial cells. CD163-positive cells include skin histiocytes, Kupffer cells, spleen macrophages of the red pulp, and some thymus macrophages. The antigen is also found abundantly in human term placenta, and regularly in acute and chronic inflammatory lesions.

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**TECHNICAL AND ANALYTICAL CHARACTERISTICS**

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| <b>Product Number:</b>        | T-1063 (Lot 02PA1103)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Clone:</b>                 | 5C6 FAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Host species, isotype:</b> | Mouse IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Quantity:</b>              | 1mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>                | Affinity purified, liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                               | Supplied as a stock solution containing 2mg/ml IgG in phosphate buffered saline pH 7.2 (PBS).                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Stability:</b>             | Original vial: 1 year at 4° - 8°C from date of purchase.<br>Stock solution and aliquots thereof: 1 year at -20°C.<br>Avoid freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Applications:</b>          | Tested for immunohistochemistry (IHC) and ELISA; has been described to work in FACS and western blots.<br><br><b>Approximate working dilution for IHC:</b><br>Frozen sections: 0.5µg/ml (1:4000)<br>Paraffin sections: 1µg/ml (1:2000); pretreatment with Proteinase K for antigen retrieval is recommended (T-3401)<br><br>Optimal dilutions should be determined by the end user<br><br>Suggested positive control: Human placenta<br><br>Please see <a href="http://www.bma.ch">www.bma.ch</a> for protocols and general information |
| <b>Immunogen:</b>             | Human CD163                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein database:</b>      | <u><a href="#">human-Q86VB7</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Antigen, epitope:</b>      | The antigen is CD163; the epitope has not been further characterized                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Antigen distribution:**

**Isolated cells:** Monocytes, particularly after dexamethasone treatment or after 2-5 days in culture. Does not react with lymphocytes, granulocytes or platelets.

**Tissue sections:** Positive staining can be observed in the skin (histiocytes), gut, Kupffer cells, few alveolar macrophages, a major population of macrophages in the placenta, varying degrees of macrophages in inflamed tissues, including tumorous tissue depending on the inflammatory stage. Red pulp, but not white pulp macrophages of the spleen, and cortical macrophages of the thymus are detected.

Macrophages in the synovialis of patients with rheumatoid arthritis. In alveolar macrophages and in Kupffer cells a double staining can be observed with monoclonal antibody 25F9 (product T-1016) which is not the case in other tissues.

**Specificity:**

**Human:** monocytes and macrophages

**Other:** not tested

**Selected references**

Högger, P. et al.: J. Immunology **161**: 1883-1890 (1998).

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For in vitro research only. This product contains no preservative.