

**MONOCLONAL ANTIBODY TO  
RAT CD163  
clone ED2**



<b>Catalog nr</b>	HM3025 (lot number and expiry date are indicated on the label)
<b>Description</b>	<p>Monoclonal antibody ED2 reacts with rat CD163 cell surface glycoprotein, a 175 kDa molecule also known as ED2. CD163 is expressed by approximately 50% of peritoneal macrophages, a subset of splenic macrophages, and by macrophages in most other tissues. However, it is not expressed by monocytes, alveolar macrophages or microglial cells. Macrophage scavenger receptor CD163 also known as hemoglobin scavenger receptor (HbSR) is a member of the scavenger receptor cysteine-rich family (SRCR). Scavenger receptors have been studied primarily for their ability to bind and internalize modified lipoproteins. They have been found to be involved in the development of atherosclerosis. Scavenger receptors also function as pattern recognition receptors for a wide variety of pathogens indicating a potential role in host defence.</p> <p>CD163 is involved in the endocytosis of hemoglobin:haptoglobin complexes and is able to counter oxidative tissue damage induced by hemoglobin after hemolysis. Recent results identify new anti-inflammatory and cytoprotective effector pathways in monocytes/macrophages related to hemoglobin scavenging and metabolism, which may be relevant for atheroprotection and wound healing.</p>
<b>Species</b>	Mouse IgG <sub>1</sub>
<b>Formulation</b>	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS containing 0.1% bovine serum albumin and 0.02% sodium azide
<b>Application</b>	The monoclonal antibody ED2 can be used for immuno precipitation, flow cytometry and immunohistology on frozen and paraffin sections.
<b>Use</b>	For flow cytometry and immunohistology dilutions to be used depend on detection system applied. For paraffin sections PLP fixation is recommended. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.
<b>Storage and stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.
<b>References</b>	<ol style="list-style-type: none"><li>1. Dijkstra, C et al; The heterogeneity of mononuclear phagocytes in lymphoid organs: distinct macrophage subpopulations in the rat recognized by monoclonal antibodies ED1, ED2 and ED3. <i>Immunology</i> 1985, <b>54</b>: 589</li><li>2. Barbe, E et al ; Characterization and expression of the antigen present on resident rat macrophages recognized by monoclonal antibody ED2. <i>Immunobiology</i> 1990, <b>182</b>: 88</li><li>3. Whiteland, J et al; Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <i>J Histochem Cytochem</i> 1995, <b>43</b>: 313</li><li>4. Graversen, J et al; CD163: a signal receptor scavenging haptoglobin-hemoglobin complexes from plasma. <i>Int J Biochem Cell Biol</i> 2002, <b>4</b>: 309</li></ol>
<b>Also available</b>	HM3019                      Monoclonal antibody against Rat CD36, clone UA009 HM3007                      Monoclonal antibody against Rat Macrophages, clone F-6-J HM1061                      Monoclonal antibody against Mouse MPO (cross reactive with rat), clone 8F4