

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	CD163, Rat, clone ED2	<b>Expiry date</b>	-
<b>Catalog number</b>	HM3025		
<b>Lot number</b>	-	<b>Amount</b>	100 µg
<b>Volume</b>	1 ml	<b>Concentration</b>	100 µg/ml
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Conjugate</b>	None
<b>Host Species</b>	Mouse IgG1	<b>Purification</b>	Protein G
<b>Endotoxin</b>	N.A.		
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•	•		•			•	
No								
N.D.			•		•	•		•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

- IHC-P: For paraffin sections PLP fixation is recommended.

**General Information**

**Description** 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. 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.

- References**
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. *Immunology* 1985, *54*: 589
  2. Barbe, E et al ; Characterization and expression of the antigen present on resident rat macrophages recognized by monoclonal antibody ED2. *Immunobiology* 1990, *182*: 88
  3. Whiteland, J et al; Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. *J Histochem Cytochem* 1995, *43*: 313
  4. Graversen, J et al; CD163: a signal receptor scavenging haptoglobin-hemoglobin complexes from plasma. *Int J Biochem Cell Biol* 2002, *4*: 309

**Storage&stability** Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**

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 from the use or derivation of this product.

---

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Robbert Zwinkels

Date  
16/03/2018

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).