

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	MPO, Human, clone 266-6K1, biotinylated		
<b>Catalog number</b>	HM2164BT-50UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	0.5 ml	<b>Amount</b>	50 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN <sub>3</sub>	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	Biotin
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								1
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 1:50.

- IA: the antibody can be used as coat and detection antibody.
- W: Samples were subjected to SDS-PAGE and transferred to PVDF membrane (Ref.1).
- Positive control: Neutrophils, HL-60 cells; Negative control: Erythrocytes.

**General Information**

<b>Description</b>	The monoclonal antibody 266-6K1 recognizes human myeloperoxidase (MPO), an ~135 glycoprotein expressed in all cells of the myeloid lineage. MPO functions as an α <sub>2</sub> β <sub>2</sub> heteromultimer consisting of two heavy (α) and two light (β) chains of 55 and 15 kDa respectively. MPO is abundantly present in azurophilic granules of polymorphonuclear neutrophils (PMNs). It is an important enzyme used during phagocytic lysis of engulfed foreign particles which takes part in the defense of the organism through production of hypochlorous acid (HOCl), a potent oxidant. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity. Upon activation of neutrophils, MPO can be rapidly released and as such useful in body fluids as marker for inflammatory status. Involvement of MPO has been described in numerous diseases such as atherosclerosis, lung cancer, Alzheimer's disease, inflammatory bowel disease and multiple sclerosis. Autoimmune antibodies to MPO (so called ANCA) are involved in Wegener's disease. Since the discovery of MPO deficiency, initially regarded as rare and restricted to patients suffering from severe infections, MPO has attracted more clinical attention.
<b>Aliases</b>	Myeloperoxidase
<b>Cross reactivity</b>	Rat: No; Mouse: No.
<b>References</b>	1. La Rocca, G et al; Oxidative stress induces myeloperoxidase expression in endocardial endothelial cells from patients with chronic heart failure. <i>Basic Res Cardiol</i> 2009, <i>104</i> : 307
<b>Storage&amp;stability</b>	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.

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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  
Brenda Teunissen

Date  
03/12/2019

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