

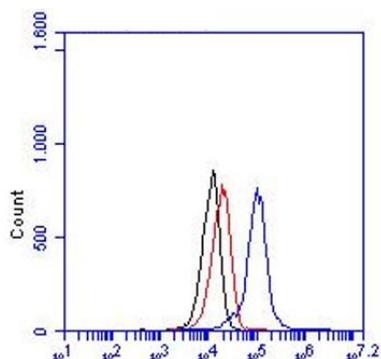
## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

<b>Product name</b>	MPO, Rat, clone 2D4	<b>Expiry date</b>	-
<b>Catalog number</b>	HM3030-20UG	<b>Amount</b>	20 µg
<b>Lot number</b>	-	<b>Concentration</b>	100 µg/ml
<b>Volume</b>	200 µl	<b>Conjugate</b>	None
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Purification</b>	Protein G
<b>Host Species</b>	Mouse IgG1		
<b>Endotoxin</b>	N.A.		
<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



FC: detection of MPO in Wehi3BD+ cells. Red, black and blue line represent the isotype control, cells only and HM3030F with a concentration of 20 µg/ml, respectively.

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 a detection antibody.
- FC: Cells are fixed with 4% paraformaldehyde and permeabilized with 0.1% saponin.

### General Information

**Description** The monoclonal antibody 2D4 reacts with rat myeloperoxidase (MPO). MPO is a glycoprotein with an alpha2beta2 heteromultimer expressed in all cells of the myeloid lineage. MPO is abundantly present in azurophilic granules of polymorphonuclear neutrophils. 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. MPO is rapidly released by activated polymorphonuclear neutrophils. Involvement of MPO has been described in numerous diseases such as atherosclerosis, lung cancer, Alzheimer's disease and multiple sclerosis. Autoimmune antibodies to MPO are involved in Wegeners 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. In experimental studies antibodies to MPO can be used for various purposes ranging from flow cytometric analysis to detection of polymorphonuclear neutrophils in tissue sections.

**Immunogen** Mouse myeloperoxidase

**Aliases** Myeloperoxidase

<b>Gene</b>	Gene name: Mpo
<b>Cross reactivity</b>	Mouse: Yes
<b>References</b>	1. Liu, G et al; Kinase AKT1 Negatively Controls Neutrophil Recruitment and Function in Mice J Immunol 2013, 191:2680
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least 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 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  
11/01/2021

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