

Datasheet: MCA6260GA

Description:	MOUSE ANTI HUMAN MYELOPEROXIDASE
Specificity:	MYELOPEROXIDASE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	D02-2A1
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			1.0 ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified native human myeloperoxidase

**External Database
Links**

UniProt:

[P05164](#) [Related reagents](#)

Entrez Gene:

[4353](#) MPO [Related reagents](#)

Fusion Partners	Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0
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Specificity	Mouse anti Human myeloperoxidase antibody, clone D02-2A1, recognizes myeloperoxidase (MPO), a heme-containing enzyme belonging to the XPO subfamily of peroxidases. It is largely expressed by neutrophils within azurophilic granules, but is also present in monocytes, macrophages and central nervous microglial cells (Strzepa <i>et al.</i> 2017). MPO is synthesized as a precursor protein that undergoes a series of modifications including cleavage and glycosylation to form the catalytically inactive MPO precursor. Subsequently an iron-heme is incorporated into the protein resulting in the catalytically active MPO (Hansson <i>et al.</i> 2006).
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In response to bacterial infection, neutrophils containing MPO fuse with the phagosome and when the common membrane is ruptured, MPO is release into the phagosome. MPO then uses H2O2 to generate the bactericidal compound, hypochlorous acid (HClO) ([Strzepa *et al.* 2017](#)).

MPO deficiency is associated with a higher occurrence of severe infections and chronic inflammatory processes, although ~50% of individuals are asymptomatic ([Antachopoulos 2010](#)).

The purified Mouse anti Human myeloperoxidase antibody, clone D02-2A1 (MCA6260GA) can be used as a capture antibody in a sandwich ELISA with the biotinylated Mouse anti Human myeloperoxidase antibody, clone D08-8G5 ([MCA6261B](#)) as the detection antibody.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA6260GA 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

Recommended Useful Reagents

[MOUSE ANTI HUMAN MYELOPEROXIDASE:Biotin \(MCA6261B\)](#)

ELISA Matched Pair - Detection Antibody

[MOUSE ANTI HUMAN MYELOPEROXIDASE:Biotin \(MCA6261B\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
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