

Product datasheet for **SM1475P**

Myeloperoxidase (MPO) Mouse Monoclonal Antibody [Clone ID: 2C7]

Product data:

Product Type: Primary Antibodies

Clone Name: 2C7

Applications: ELISA, FC, IHC, WB

Recommended Dilution: **ELISA.**

Western blotting (*Non Reducing Conditions, See Audrian et al. in Ref.1).*

Flow Cytometry: 1/50-1/100 (Membrane permeabilisation is required).

The antibody clone 2C7 may be of value in the study of myeloid cells and myeloid leukaemias by Flow Cytometry following cell permeabilisation.

Immunohistochemistry on Frozen Sections: 1/1000-1/5000.

Immunohistochemistry on Paraffin Sections: 1/500-1/1000.

Recommended Positive Control: Bone Marrow Tissue.

Reactivity: Human

Host: Mouse

Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human Myeloperoxidase.

Spleen cells from immunised mice were fused with cells of the mouse X63 AG8653 myeloma cell line.

Specificity: This antibody is specific to Myeloperoxidase (MPO).

Recognizes native MPO in Western blots, and the heavy chain following boiling of the sample. It also recognizes recombinant MPO in Western blots and weakly in ELISA.

Negative Species: Rat.

Formulation: PBS

State: Purified

State: Liquid purified IgG fraction

Preservative: 0.09% Sodium Azide

Concentration: lot specific

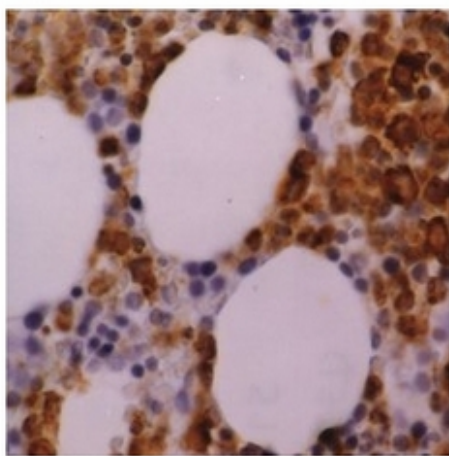
Purification: Affinity Chromatography on Protein A

Conjugation: Unconjugated

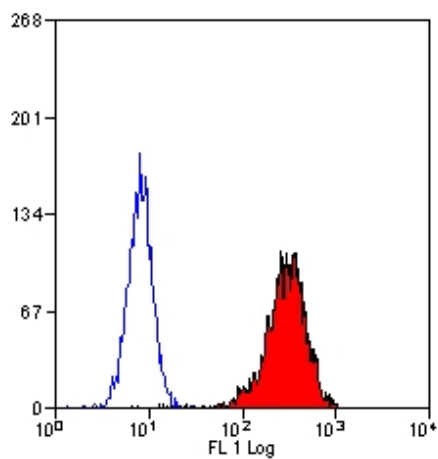


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Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	myeloperoxidase
Database Link:	Entrez Gene 4353 Human P05164
Background:	<p>Myeloperoxidase/MPO is an important component of azurophilic granules in neutrophils, being involved in microbicidal processes. The protein is a multimer of 2 heavy chains (55 kD) and two light chains (15 kD), the heavy chains being linked by a disulphide bond. Myeloperoxidase is a hemoprotein that is abundantly expressed in neutrophils and secreted during their activation. Native Myeloperoxidase is represented as a covalently bound tetrameric complex of two glycosylated alpha chains (MW 59-64 kDa) and two unglycosylated beta chains (MW 14 kDa) with total MW 150 kDa and theoretical pI 9.2. Traditionally Myeloperoxidase was considered as a main target of anti-neutrophil cytoplasm antibodies (ANCA), the serological markers for certain systemic vasculitides e.g. periarteriitis nodosa, microscopic polyarteriitis and pulmonary eosinophilic granulomatosis (Churg-Strauss syndrome). Low to moderate anti-Myeloperoxidase auto-antibody levels are also reported in rheumatoid arthritis. Recently it was shown that Myeloperoxidase participates in the initiation and progression of cardiovascular disease. It possesses potent proinflammatory properties and may contribute directly to tissue injury. Now Myeloperoxidase is under consideration as one of the most promising cardiac markers.</p>
Synonyms:	MPO

Product images:

Staining of Human bone marrow: Formalin fixed, paraffin processed tissue with Mouse anti Human Myeloperoxidase.



Staining of Human peripheral blood granulocytes with Mouse Anti Human Myeloperoxidase antibody following membrane permeabilisation.