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## Monoclonal Antibody to Myeloperoxidase - PE MPO Alternate names: **Catalog No.:** SM1475R **Quantity:** 100 Tests **Background:** MPO is an important component of azurophilic granules in neutrophils. 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 pl 9.2. Traditionally Myeloperoxidase was considered as a main target of anti-neutrophil cytoplasm antibodies (ANCA), the serological markers for certain systemic vasculities e.g. periarteriitis nodosa, microscopic polyarteriitis and pulmonary eosinophilic granulomatosis (Churg-Strauss syndrome). Low to moderate anti-Myeloperoxidase autoantibody 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. **Uniprot ID:** P05164 **NCBI:** 9606 Host / Isotype: Mouse / IgG1 2C7 **Clone:** Immunogen: Human Myeloperoxiase Remarks: Spleen cells from immunised mice were fused with cells of the mouse X63 AG8-653 myeloma cell line. Format: State: Lyophilized purified IgG fraction Purification: Affinity Chromatography on Protein G Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative, 1% BSA and 5% sucrose as stabilizer Label: PE – R. Phycoerythrin (RPE) Reconstitution: Restore with 1 ml distilled water **Applications:** Flow Cytometry: Use 10 µl of neat antibody to label 10e6 cells in 100 µl (Membrane permeabilisation is required). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. **Specificity:** This antibody recognises myeloperoxidase (MPO). It may be used for the Flow Cytometric detection of Myeloid cells following membrane For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com



ANTIBODIES	SM1475R: Monoclonal Antibody to Myeloperoxidase - PE
	permeablisation.
Species Reactivity:	Tested: Human. Does not react on rat.
Storage:	Store the antibody undiluted Prior to and following reconstitution at 2-8°C. DO NOT FREEZE! This antibody is photosensitive and should be protected from light.
	Shelf life: one year from despatch.
Product Citation:	1. Denise Lau, Hanke Mollnau, Jason P. Eiserich, Bruce A. Freeman, Andreas Daiber, Ursula M. Gehling, Jens Brümmer, Volker Rudolph, Thomas Münzel, Thomas Heitzer, Thomas Meinertz, and Stephan Baldus. Myeloperoxidase mediates neutrophil activation by association with CD11b/CD18 integrins. PNAS, Jan 2005; 102: 431-436.
General References	<ul> <li>1. Audrain, M.A.P. et al. (1997) Anti-native and recombinant myeloperoxidasae monoclonals and human aytoantibodies. Clin. Exp. Immunol. 107: 127-134.</li> <li>2. Patry, Y.C. et al. (1997) Difference in antigenic determinant profiles between human and rat myeloperoxidase. Clin ExpImmunol. 132: 505-508.</li> </ul>