

Mouse MPO Monoclonal Antibody | anti-MPO antibody

MPO, Mouse, mAb 8F4

CATALOG # AAA77797	HOST Mouse	REACTIVITY Reactivity: Mouse. Cross reactivity: Rat	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

MPO; Monoclonal Antibody; Mouse; mAb 8F4; anti-MPO antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Reactivity: Mouse. Cross reactivity: Rat
Clonality	Monoclonal
Isotype	Mouse IgG1
Form/Format	For 0.1 mg: 1 ml (100 µg/ml) 0.2 µm filtered protein G purified biotinylated antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide. For 0.5 and higher: PBS only (concentration< 0.5mg/ml) For unit size 0.5 mg or larger
Sequence Length	745
Applicable Applications for anti-MPO antibody	IA (Immunoassay), FCM/FACS (Flow Cytometry), Activity Assay
Immunogen	Purified mouse MPO from WEHI-3 cells
Negative Control	Lymphocytes isolated from digested infarcts
Positive Control	Neutrophils isolated from digested infarcts
Preparation and Storage	Product should be stored at 4 degree C. Under recommended storage conditions, product is stable for one year.

ADDITIONAL INFORMATION

Related Product Information for anti-MPO antibody	Product Description: The monoclonal antibody 8F4 recognizes mouse myeloperoxidase (MPO). MPO is a glycoprotein produced as a single precursor, which is subsequently cleaved into a alpha and beta chain. In human the biologically active MPO is a 150kDa tetramer composed of 2 glycosylated alfa chains of 59-64 kDa and 2 beta chains of 14 kDa.- MPO is- stored in azurophilic granules of polymorphonuclear leukocytes and is rapidly released into the phagosome and extracellular space during inflammatory conditions. The enzyme catalyzes the conversion of chloride and hydrogen peroxide to hypochlorite, a potent oxidant, which functions in host defense against microorganisms. Involvement of MPO has been described in several human diseases, such as cardiovascular disease, airway inflammation, lung cancer, Alzheimer's disease and multiple sclerosis. A positive correlation between elevated MPO levels in serum and cardiovascular disease suggest an interesting role for MPO as an marker, making it possible to identify patients at risk for future cardiac events. Furthermore, there are some autoimmune diseases, in which MPO is targeted by antineutrophil cytoplasm antibodies. Studies with MPO-knockout mice have shown an- increased susceptibility to pneumonia following intratracheal infections. Moreover, MPO deficient- mice are more susceptible to experimental autoimmune encephalitis, a T cell-dependent neuronal disease, and have an increased expression of arteriosclerotic plaques compared to wild-type mice. The anti-mouse MPO monoclonal antibody 8F4 recognizes natural MPO in biological solutions by ELISA,- in frozen tissue sections fixed with acetone and in flow cytometry using a- cell permeabilization method. The antibody 8F4 is cross-reactive- with rat MPO
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References	1. Huugen, D et al; Aggravation of anti-myeloperoxidase antibody-induced glomerulonephritis by bacterial lipopolysaccharide: role of tumor necrosis factor-alpha. Am J Pathol 2005, 167: 47 2. Wang, D et al; C/EBPalpha directs monocytic commitment of primary myeloid progenitors. Blood 2006, 108:1223 3. Matthijsen, M et al; Myeloperoxidase is critically involved in the induction of organ damage after renal ischemia reperfusion. Am J Pathol 2007, 171: 1743 4. Leeuwen van, M et al; Accumulation of myeloperoxidase-positive neutrophils in atherosclerotic lesions in LDLR -/- mice. Arterioscler Thromb Vasc Biol 2008, 28: 84 5. Nahrendorf, M et al; An activatable MR imaging agent reports myeloperoxidase activity in healing infarcts and detects the anti-inflammatory effects of atorvastatin on ischemia-reperfusion injury non-invasively. Circulation 2008, 117: 1153
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4557759
NCBI GeneID	4353
NCBI Accession #	NP_000241.1
NCBI GenBank Nucleotide #	NM_000250.1
Molecular Weight	87,248 Da
NCBI Official Full Name	myeloperoxidase
NCBI Official Synonym Full Names	myeloperoxidase
NCBI Official Symbol	MPO
NCBI Protein Information	myeloperoxidase
UniProt Protein Name	Myeloperoxidase
UniProt Gene Name	MPO
UniProt Synonym Gene Names	MPO
UniProt Entry Name	PERM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/mpo-antibody-immunoassay-flow-cytometry-elisa/77797>