Rabbit Myeloperoxidase Polyclonal Antibody | anti-MPO antibody

Myeloperoxidase Antibody FITC-Conjugated N-epitope

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA75908	**Rabbit**	**Human, Mouse, Rat**	**Western Blot, Immunoprecipitation, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA**

PRODUCT SYNONYMS

Myeloperoxidase; Polyclonal Antibody; Myeloperoxidase Antibody FITC-Conjugated N-epitope; 84 kDa myeloperoxidase antibody; 89 kDa myeloperoxidase antibody; EC 1.11.1.7 antibody; EC1.11.2.2 antibody; MPO antibody; Myeloperoxidase heavy chain antibody; Myeloperoxidase light chain antibody; PERM_HUMAN antibody; anti-MPO antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Form/Format	FITC-Conjugated Immunoglobulins
Sequence Length	745
Applicable Applications for anti-MPO antibody	WB (Western Blot), IP (Immunoprecipitation), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA, CM (Confocal Microscopy)
Immunogen	Synthetic peptide taken within amino acid region 290-340 human Myeloperoxidase protein.
Determinant	N-epitope
Molecular Function	Oxireductase, Peroxidase, chromatin binding
Structure	Homodimer; disulfide linked. Each monomer contains a light chain and heavy chain
Preparation and Storage	-20• degree C for long term storage

IMAGES

WB (Western Blot)
WB of MPO-101AP with RAW cells. 1 :500 antibody dilution in DiluOButfer.

IHC (Immunohistochemistry)
IHC of MPO-101 AP with lung tissue. 1 :200 antibody dilution in DiluObuffer.

ADDITIONAL INFORMATION

Related Product Information for anti-MPO antibody	Overview: Myeloperoxidase (MPO) is a functionally important component of the normal human neutrophil azurophil granule of polymorphonuclear leukocyte's host defense system. MPO is a hemoprotein that is abundantly expressed in neutrophils and secreted during their activation. The inflammatory component of allergic reactions can be measured by eosinophil cationic protein (ECP, specific for eosinophils) and myeloperoxidase (MPO, specific for neutrophils) measurement (1). Neutrophils, especially in acute infection or the myeloid leukemias, may shed platelet-sized particles that can readily be distinguished from true platelets because they contain neutrophil myeloperoxidase, an enzyme that is not inhibited by glutaraldehyde. Traditionally Myeloperoxidase was considered as a serological marker for granulomatosis (Churg-Strauss syndrome), the main target of anti-neutrophil cytoplasm antibodies (ANCA), Low to moderate anti-Myeloperoxidase autoantibody levels are also reported in rheumatoid arthritis. Recently it was shown that MPO participates in the initiation and progression of cardiovascular disease. It possesses potent pro-inflammatory properties and may contribute directly to tissue injury. Now Myeloperoxidase is uncertain systemic vasculitis e.g. periarteritis nodosa, microscopic polyarteritis and pulmonary eosinophilic grander consideration as one of the most promising cardiac markers. Human myeloperoxidase, a 745 amino acid protein, is produced by a gene composed of 12 exons and 11 introns. The sequence was found to contain an open reading frame, 2,235 nucleotides coding for a protein of 745 amino acids with a calculated Mr of 83,868. The heavy chain of myeloperoxidase, consisting of 467 amino acids, was located on the COOH terminus half of the protein. 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, each of which is associated with a heme-like prosthetic group. The heme environment, defined by X-ray crystallographic analyses of MPO appears to be highly conserved in four mammalian peroxidases (lactoperoxidase, thyroid, eosinophil and Myeloperoxidase). MPO when heated under non-reducing, denaturing conditions, MPO is cleaved to produced 22 and a 38kDa proteins, these two species are produced via a novel autolytic cleavage at Meth409 and Pro410 (2).

NCBI AND UNIPROT INFORMATION

NCBI GI #	266270
NCBI GeneID	4353
UniProt Accession #	P05164; Q14862; Q4PJH5; Q9UCL7; A1L4B8
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://stage.aaabiotech.com/polyclonal/myeloperoxidase-antibody-western-blot-immunoprecipitation-immunohistochemistry-immunofluorescence-immunocytochemistry-confocal-microscopy-elisa/75908