10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-MPO Antibody
Catalog # ABO11775

Specification

Anti-MPO Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P05164
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Myeloperoxidase(MPO) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MPO Antibody - Additional Information

Gene ID 4353

Other Names
Myeloperoxidase, MPO, 1.11.2.2, Myeloperoxidase, 89 kDa myeloperoxidase, 84 kDa myeloperoxidase, Myeloperoxidase light chain, Myeloperoxidase heavy chain, MPO

Calculated MW
83869 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Lysosome.

Protein Name
Myeloperoxidase

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human Myeloperoxidase recombinant protein (Position:S406-S745). Human Myeloperoxidase shares 90% amino acid (aa) sequence identity with mouse Myeloperoxidase.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the peroxidase family. XPO subfamily.

Anti-MPO Antibody - Protein Information

Name MPO (HGNC:7218)

Function
Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity (PubMed:9922160). Mediates the proteolytic cleavage of alpha-1-microglobulin to form t-alpha-1-microglobulin, which potently inhibits oxidation of low-density lipoprotein particles and limits vascular damage (PubMed:25698971).

Cellular Location
Lysosome.

Anti-MPO Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MPO Antibody - Images

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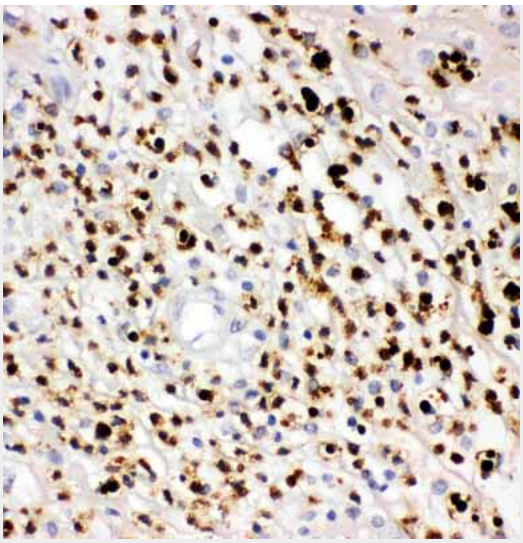
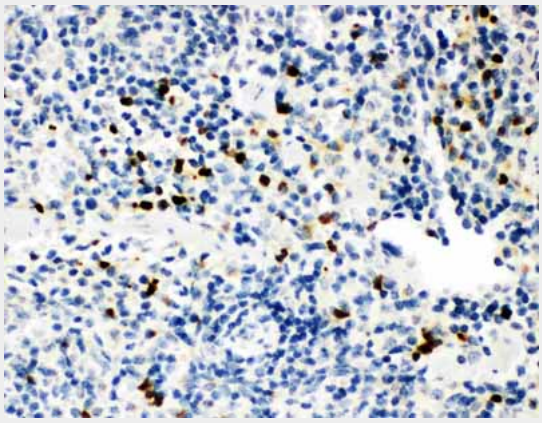
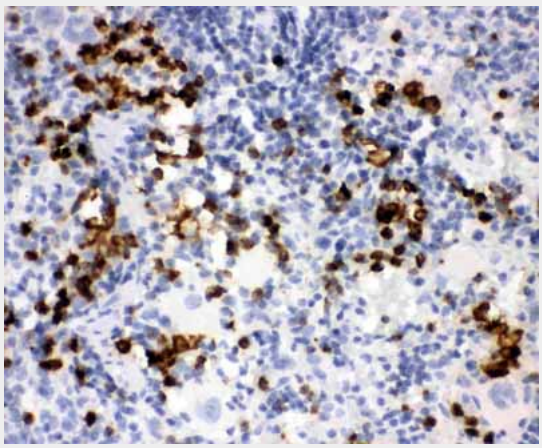


Anti-Myeloperoxidase Picoband antibody, ABO11775-1.JPGIHC(P): Human Appendicitis Tissue



Anti-Myeloperoxidase Picoband antibody, ABO11775-2.JPGIHC(P): Mouse Spleen Tissue



Anti-Myeloperoxidase Picoband antibody, ABO11775-3.JPGIHC(P): Rat Spleen Tissue

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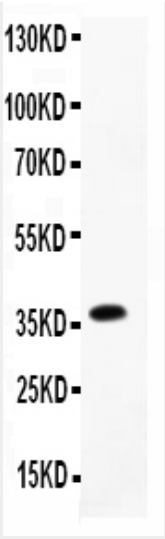

Anti-Myeloperoxidase Picoband antibody, ABO11775-4.jpgAll lanes: Anti-Myeloperoxidase(ABO11775) at 0.5ug/mlWB: Recombinant Human Myeloperoxidase Protein 0.5ngPredicted bind size: 37KDObserved bind size: 37KD

Anti-MPO Antibody - Background

Myeloperoxidase (MPO) is a mammalian phagocyte hemoprotein thought to primarily mediate host defense reactions. It is abundantly expressed in neutrophils and secreted during their activation. Myeloperoxidase is part of the host defense system of human polymorphonuclear leukocytes, responsible for microbicidal activity against a wide range of organisms. It is located in the nucleus as well as in the cytoplasm. Intranuclear MPO may help to protect DNA against damage resulting from oxygen radicals produced during myeloid cell maturation and function. The standard product used in this kit is the product of gene recombination, consisting of 697(A49-S745) amino acids with the molecular mass of 80KDa.