

Product name:	MPO Rabbit Polyclonal Antibody
Cat number:	ABN14056
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the N-terminal region of human MPO. AA range:41-90
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	85kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Myeloperoxidase (MPO) is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of 2 light chains and 2 heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of neutrophils. [provided by RefSeq, Nov 2014],catalytic activity: $\text{Cl}(-) + \text{H}(2)\text{O}(2) = \text{HOCl} + 2 \text{H}(2)\text{O}$.,catalytic activity: $\text{Donor} + \text{H}(2)\text{O}(2) = \text{oxidized donor} + 2 \text{H}(2)\text{O}$.,cofactor: Binds 1 calcium ion per heterodimer.,cofactor: Binds 1 heme B (iron-protoporphyrin IX) group covalently per heterodimer.,disease: Defects in MPO are the cause of myeloperoxidase deficiency (MPD) [MIM:254600]. MPD is an autosomal recessive defect that results in disseminated candidiasis.,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.,online information: MPO mutation db,online information: Myeloperoxidase entry,similarity: Belongs to the peroxidase family. XPO subfamily.,subunit: Tetramer of two light chains and two heavy chains.,