

Anti-Myeloperoxidase MPO Antibody

Catalog Number: A00372

About MPO

Human myeloperoxidase (MPO) is a dimeric protein composed of two heavy subunits (53 kDa) and two light subunits (15 kDa). Each MPO molecule contains two prosthetic porphyrins which play an important role in the catalytic cycle. Molecular weights for MPO isoforms from pools of normal human samples range from 114,000 to 140,000 daltons reflecting a heterogeneous mixture of isoforms when assayed under non-reducing conditions of SDS-PAGE. Often MPO from a single donor will yield a homogenous preparation reflecting a single isoform. The carbohydrate component of MPO, consisting of mannose, glucose and N-acetylglucosamine residues is 2.5%. MPO is inhibited by azide and other compounds. MPO is stored in primary granules of neutrophils and serves as a bactericidal agent in that MPO catalyzes the production of hypochlorous acid (HOCl), a powerful oxidant. HOCl is derived from chloride ion (Cl⁻) and hydrogen peroxide (H₂O₂). In a number of inflammatory situations, MPO is released into the extracellular matrix where its measurement can be used as an indication of neutrophil activation.

Overview

Product Name	Anti-Myeloperoxidase MPO Antibody
Reactive Species	Human
Description	Boster Bio Anti-Myeloperoxidase MPO Antibody (Catalog # A00372). Tested in WB applications. This antibody reacts with Human.
Application	WB
Clonality	Polyclonal A12
Formulation	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Storage Instructions	Store vial at 4°C prior to restoration. For extended storage aliquot contents and freeze at -20°C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4°C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Rabbit
Uniprot ID	P05164

Technical Details

Immunogen	Myeloperoxidase [Human Leukocytes]
Predicted Reactive Species	Mouse, Rat
Isotype	Antiserum
Form	Lyophilized

Concentration	75 mg/mL by Refractometry
Purification	This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Myeloperoxidase [Human Leukocytes]. Cross-reactivity against Myeloperoxidase from other tissues and species may occur but have not been specifically determined.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>ELISA: 1:200,000 IP: 1:100 WB: 1:5,000</p>

Anti-Myeloperoxidase MPO Antibody (A00372) Images



Figure 1. Western blot analysis of MPO using anti-MPO antibody (A00372).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MPO antigen affinity purified polyclonal antibody (Catalog # A00372) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-Rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1022) with Tanon 5200 system. A specific band was detected for MPO.

1 Publications Citing This Product

1. PubMed ID: 30043859, The Gastric Mucosa from Patients Infected with CagA or VacA Helicobacter pylori Has a Lower Level of Dual Oxidase-2 Expression than Uninfected or %u2026

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