

Myeloperoxidase / MPO Antibody

Catalog No	Format	Size
4353-RBP2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4353-RBP2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4353-RBP2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

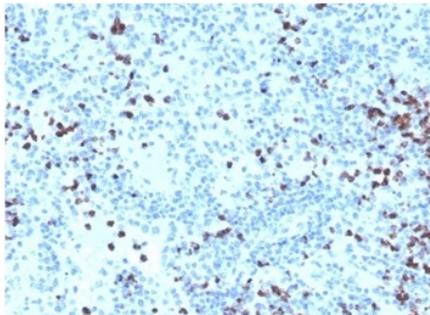
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

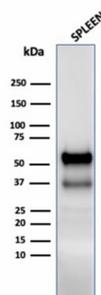
Gene Name	MPO
Immunogen	Synthetic peptide corresponding to residues within aa150-250 of Myeloperoxidase was used as an immunogen.
Host	Rabbit
Clonality	Polyclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	heavy-light promoter: 72kDa; dimer: 140kDa
Cellular Localization	Lysosome
Species Reactivity	Human
Positive Control	Human B cell lymphoma or spleen or liver tissue.

**Optimal dilution for a specific application should be determined.*

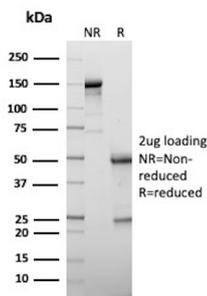
Product Images for Myeloperoxidase / MPO Antibody



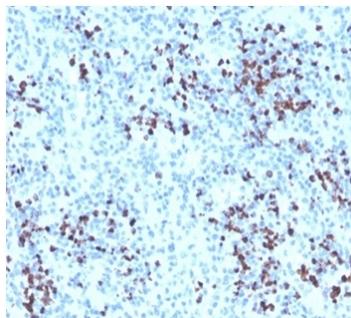
Formalin-fixed, paraffin-embedded human spleen stained with Myeloperoxidase Rabbit Polyclonal Antibody.



Formalin-fixed, paraffin-embedded human spleen stained with Myeloperoxidase Rabbit Polyclonal Antibody.



SDS-PAGE Analysis of Purified Myeloperoxidase Rabbit Monoclonal Antibody (N/A). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human spleen stained with Myeloperoxidase Rabbit Polyclonal Antibody.

Specificity & Comments

The heme protein myeloperoxidase (MPO) is a major component of azurophilic granules of neutrophils and polymorphonuclear leukocytes. Optimal oxygen-dependent microbiocidal activity depends on MPO as the critical enzyme for the generation of hypochlorous acid and other toxic oxygen products. The MPO precursor is synthesized during the promyelocytic stage of myeloid differentiation and is subsequently processed and transported intracellularly to the lysosomes. The precursor undergoes cotranslational N-linked glycosylation to produce a glycoprotein. Glucosidases in the endoplasmic reticulum (ER) or early cis Golgi convert the pro-MPO to a form which is sorted into a prelysosomal compartment, which undergoes final proteolytic maturation to native MPO, a pair of heavy-light protomers. In normal neutrophils, MPO is expressed as a dimer. Calreticulin, a calcium-binding protein residing in the ER, interacts specifically with fully glycosylated pro-MPO. MPO mRNA is abundant in human promyelocytic HL-60 and mouse myeloid leukemia NFS-60 cells. MPO is expressed at high levels in circulating neutrophils and monocytes but is not detectable in microglia, brain-specific macrophages or normal brain tissue. MPO, which has a molecular weight of approximately 140 kD, is a homodimer that can be split into two halves that still have enzymatic activity. These hemi-MPO monomers consist of a 59-kD alpha chain and a 13.5-kD beta chain.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200 µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Hematopoietic Stem Cells, Immunology