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Product datasheet for DP053

Myeloperoxidase (MPO) Rabbit Polyclonal Antibody

Product data:

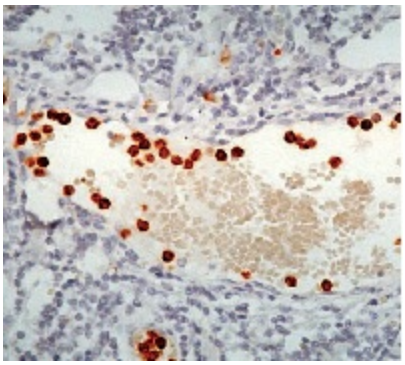
Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Embedded Sections: Use a dilution of 1/25-1/100 in an ABC method (30 minutes at room temperature). Requires high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining. Recommended Positive Control: Tonsil.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Myeloperoxidase isolated from human granulocytes.
Specificity:	This antibody reacts with Myeloperoxidase (MPO). It stains granules of neutrophils granulocytes in spleen, bone marrow, tonsil and blood smears. Cellular Localization: Cytoplasmic.
Formulation:	State: Purified State: Liquid purified Ig fraction containing Sodium Azide as preservative.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	myeloperoxidase
Database Link:	Entrez Gene 4353 Human P05164

View online »

Background: 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.

Synonyms: MPO

Product images:



Formalin fixed paraffin embedded human tonsil stained with Myeloperoxidase antibody. DP053