Anti-Myeloperoxidase Antibody [PD00-20]

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity: Applications:	Human mIHC
Molecular Wt:	Predicted band size: 84 kDa
Clone number:	PD00-20
Description:	Myeloperoxidase (MPO) is a peroxidase enzyme that in humans is encoded by the MPO gene on chromosome 17. MPO is most abundantly expressed in neutrophil granulocytes (a subtype of white blood cells), and produces hypohalous acids to carry out their antimicrobial activity, including hypochlorous acid, the sodium salt of which is the chemical in bleach. It is a lysosomal protein stored in azurophilic granules of the neutrophil and released into the extracellular space during degranulation. Neutrophil myeloperoxidase has a heme pigment, which causes its green color in secretions rich in neutrophils, such as mucus and sputum. The green color contributed to its outdated name verdoperoxidase. Immunohistochemical staining for myeloperoxidase used to be administered in the diagnosis of acute myeloid leukemia to demonstrate that the leukemic cells were derived from the myeloid lineage. Myeloperoxidase staining is still important in the diagnosis of myeloid sarcoma, contrasting with the negative staining of lymphomas, which can otherwise have a similar appearance.
lmmunogen:	Synthetic peptide within Human Myeloperoxidase aa 600-700 (C terminal).
Positive control:	Human tonsils tissue.
Subcellular location:	Lysosome.
Database links:	SwissProt: P05164 Human
Recommended Dilutions: mIHC	1:100
Storage Buffer:	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4 $^\circ\!C$ after thawing. Aliquot store at -20 $^\circ\!C$ or -80 $^\circ\!C$. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

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Images

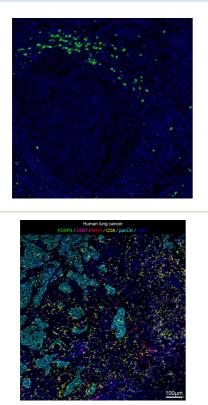


Fig1: mIHC analysis of human tonsils tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-Myeloperoxidase antibody (IRS037) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Fig2: mIHC analysis of human lung cancer tissue (Formalin/PFAfixed paraffin-embedded sections) with FOXP3 (IRS008), CD57 (IRS027), MPO (IRS037), CD8 (IRS007) and panCK (IRS010) antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Hu CH. et. al. Small molecule and macrocyclic pyrazole derived inhibitors of myeloperoxidase (MPO). Bioorg Med Chem Lett. 2021 Jun
- 2. Chen S. et. al. Targeting Myeloperoxidase (MPO) Mediated Oxidative Stress and Inflammation for Reducing Brain Ischemia Injury: Potential Application of Natural Compounds. Front Physiol. 2020 May

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