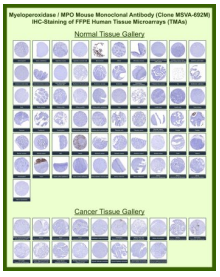
Myeloperoxidase Antibody for IHC / MPO Immunohistochemistry Antibody [clone MSVA-692M] (V6098)

Catalog No.	Formulation	Size
V6098-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6098-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	MSVA-692M
UniProt	P05164
Localization	Lysosome
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This Myeloperoxidase Antibody for IHC / MPO Immunohistochemistry Antibody is available for research use only.



Myeloperoxidase Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Myeloperoxidase / MPO in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using mouse monoclonal antibody clone MSVA-692M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong cytoplasmic localization in granulocytic cells within bone marrow and in scattered inflammatory cells in tissues such as tonsil and spleen, consistent with expression in neutrophil lineage cells, while most epithelial and stromal tissues remain largely negative. Within tumor tissue microarrays, staining highlights infiltrating granulocytes within the tumor microenvironment. Evaluation across large TMA panels enables direct comparison of MPO expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported Myeloperoxidase expression profiles in the Human Protein Atlas and support its use as a marker of granulocytic and neutrophil differentiation.

Description

Myeloperoxidase (MPO) is a heme-containing peroxidase enzyme encoded by the MPO gene and predominantly expressed in neutrophils and other cells of the myeloid lineage. Myeloperoxidase Antibody for IHC / MPO Immunohistochemistry Antibody (clone MSVA-692M) enables visualization of MPO expression in formalin-fixed, paraffin-embedded tissue sections using immunohistochemistry. This approach allows researchers to identify MPO-positive myeloid cells within the histological architecture of normal tissues and tumors.

MPO antibody, also referred to as Myeloperoxidase antibody or myeloid peroxidase antibody in the literature, detects an abundant cytoplasmic enzyme localized within the azurophilic granules of neutrophils and other granulocytic cells. Because of this restricted expression pattern, immunohistochemistry staining with Myeloperoxidase Antibody for IHC highlights granulocytes and related myeloid lineage cells in tissue sections. The staining pattern typically appears as granular cytoplasmic labeling corresponding to MPO-containing granules.

Immunohistochemistry analysis with MPO antibodies is widely used in hematopathology and cancer research to identify cells of myeloid origin. MPO immunohistochemistry staining can distinguish neutrophil lineage cells and is frequently used to evaluate inflammatory infiltrates or characterize myeloid differentiation in tumor or hematologic specimens. Cytoplasmic MPO staining within granulocytes provides a clear histological marker of myeloid cell populations.

Immunohistochemistry also allows investigators to examine MPO-positive cells within the context of tissue architecture. In normal tissues, MPO-positive granulocytes may be observed within bone marrow or circulating within blood-rich organs. In tumor samples or inflammatory tissues, immunohistochemistry staining may highlight infiltrating neutrophils or other MPO-expressing cells present within the tumor microenvironment.

Myeloperoxidase Antibody for IHC (clone MSVA-692M) has been evaluated by immunohistochemistry across a wide range of normal and cancer tissues using tissue microarray analysis. The immunohistochemistry staining patterns observed with this antibody align with Myeloperoxidase / MPO expression data reported in the Human Protein Atlas, supporting its use for histological detection of MPO-expressing cells. This antibody therefore supports immunohistochemistry-based visualization of MPO-positive myeloid cells in tissue sections.

Explore our Myeloperoxidase Antibody / Neutrophil Marker Antibody page for additional validation data and applications involving neutrophil identification, myeloid lineage analysis, and innate immune cell detection.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the Myeloperoxidase Antibody for IHC / MPO Immunohistochemistry Antibody should be determined by the researcher.

2. This MPO / Myeloperoxidase antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment of human MPO protein (exact sequence is proprietary) was used as the immunogen for the MPO / Myeloperoxidase antibody.

Storage

MPO / Myeloperoxidase antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to

-80oC.

Alternate Names

MPO antibody, Myeloperoxidase antibody, Myeloperoxidase MPO antibody, Myeloid peroxidase antibody, Myeloperoxidase enzyme antibody