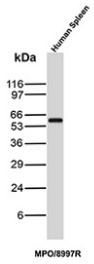
Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R / MPO Antibody [clone MPO/8997R] (V4527)

Catalog No.	Formulation	Size
V4527-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4527-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4527SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

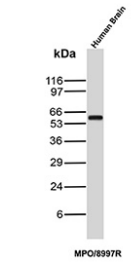
Recombinant RABBIT MONOCLONAL

Bulk quote request

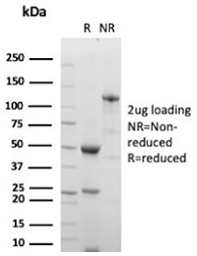
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MPO/8997R
Purity	Protein A/G affinity
UniProt	P05164
Localization	Cytoplasm
Applications	Western blot: 2-4ug/ml
Limitations	This Myeloperoxidase antibody is available for research use only.



Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R / MPO Antibody. Western blot analysis of human spleen tissue lysate using Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R. A band is detected at approximately 60 kDa, consistent with the predicted molecular weight of the Myeloperoxidase / MPO alpha chain, which may appear within the ~59-64 kDa range depending on glycosylation and maturation of the enzyme in granulocytic cells.



Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R / MPO Antibody. Western blot analysis of human brain tissue lysate using Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R. A band is detected at approximately 60 kDa, consistent with the predicted molecular weight of the Myeloperoxidase / MPO alpha chain. MPO is typically expressed in neutrophils and other myeloid lineage cells, and detection in brain lysate is consistent with the presence of infiltrating or resident myeloid cells within the tissue.



SDS-PAGE Analysis of Purified recombinant Myeloperoxidase antibody (clone MPO/8997R). Confirmation of Purity and Integrity of Antibody.

Description

Myeloperoxidase (MPO) is a heme-containing oxidoreductase encoded by the MPO gene and is one of the most abundant proteins stored in the azurophilic granules of neutrophils. This enzyme plays a major role in innate immune defense by catalyzing the formation of highly reactive oxidant species during the respiratory burst of activated phagocytes. Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R recognizes Myeloperoxidase / MPO and supports detection of this important immune enzyme in studies focused on neutrophil biology, inflammation, and myeloid cell function. MPO participates in antimicrobial activity by converting hydrogen peroxide and chloride ions into hypochlorous acid, a potent oxidant capable of killing engulfed microorganisms.

Myeloperoxidase antibody, also referred to as MPO antibody or myeloid peroxidase antibody in the literature, detects a granule-associated enzyme that is highly enriched in neutrophils and present at lower levels in monocytes and immature myeloid precursors. Because MPO expression is strongly associated with granulocytic lineage cells, the protein is widely used as a marker for identifying neutrophils and studying myeloid cell infiltration in tissues. Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R enables analysis of MPO-positive cells in research examining inflammatory responses, innate immune activity, and granulocyte distribution within biological samples.

During neutrophil activation, MPO-containing granules fuse with phagosomes or are released extracellularly through degranulation. The enzyme contributes not only to microbial killing but also to inflammatory signaling and oxidative tissue modification. MPO-generated oxidants can react with proteins, lipids, and nucleic acids, linking MPO activity to both antimicrobial defense and tissue damage in chronic inflammatory diseases. As a result, MPO is frequently investigated in research areas such as cardiovascular disease, autoimmune disorders, infection biology, and tumor-associated inflammation.

Detection of MPO with Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R allows researchers to identify granulocytic cells and evaluate neutrophil involvement in immune responses. Analysis of MPO expression can provide insight into inflammatory cell recruitment, granulocyte differentiation, and oxidative immune mechanisms in normal physiology and disease states. This recombinant rabbit monoclonal antibody provides a defined reagent for studying Myeloperoxidase / MPO in research focused on innate immunity, inflammation, and myeloid cell biology.

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.

Application Notes

Optimal dilution of the Myeloperoxidase Antibody Recombinant Rabbit MAb MPO/8997R should be determined by the

researcher.

Immunogen

A recombinant fragment of human protein was used as the immunogen for the Myeloperoxidase antibody.

Storage

Aliquot the Myeloperoxidase antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

MPO antibody, Myeloperoxidase antibody, Myeloid peroxidase antibody, Neutrophil myeloperoxidase antibody

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