

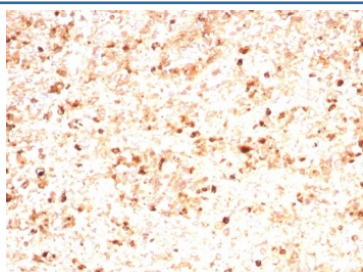
## MPO Antibody / Myeloperoxidase [clone rMPO/8694] (V4516)

Catalog No.	Formulation	Size
V4516-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4516-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4516SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

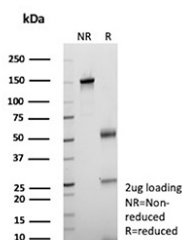
Recombinant **MOUSE MONOCLONAL**

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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rMPO/8694
Purity	Protein A/G affinity
UniProt	P05164
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This MPO antibody is available for research use only.



IHC staining of FFPE human spleen tissue with MPO antibody (clone rMPO/8694).  
 HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free MPO antibody (clone rMPO/8694) as confirmation of integrity and purity.

## Description

MPO antibody recognizes myeloperoxidase, a heme-containing peroxidase enzyme found predominantly in neutrophil granulocytes and monocytes. This protein plays a crucial role in the innate immune system by generating reactive oxidizing agents that help destroy invading pathogens. Myeloperoxidase is stored in azurophilic granules and is released during the respiratory burst of activated neutrophils. It catalyzes the formation of hypochlorous acid from hydrogen peroxide and chloride ions, providing a potent antimicrobial defense mechanism. Due to its strong oxidative activity, MPO has also been implicated in contributing to tissue damage during chronic inflammation.

Research involving MPO antibody has been central in understanding its role in both protective and pathological processes. Elevated levels of MPO have been linked to cardiovascular diseases such as atherosclerosis, where MPO-generated oxidants can modify lipoproteins, impair endothelial function, and promote vascular inflammation. Autoantibodies against myeloperoxidase are a key diagnostic marker for certain forms of vasculitis, particularly microscopic polyangiitis. These associations have made MPO an important biomarker in both research and clinical settings.

Using clone MPO/7118, investigators can reliably detect the protein in human tissue samples. The clone has demonstrated consistent binding in western blot, immunohistochemistry, and other immunoassays. Studies have shown that this clone provides strong signal specificity, making it suitable for investigating MPO expression in blood smears, tissue sections, or cell lysates. The antibody can also be applied to evaluate neutrophil infiltration in inflammatory lesions or to assess the contribution of MPO activity to oxidative stress pathways.

NSJ Bioreagents offers this clone for research applications, supporting scientists examining immune responses, inflammatory processes, and vascular pathology. By providing a dependable reagent, this MPO antibody enables researchers to track one of the most important oxidative enzymes in the human immune system. Alternate names include myeloperoxidase antibody, EC 1.11.1.7 antibody, peroxidase antibody, and neutrophil peroxidase antibody.

## Application Notes

Optimal dilution of the MPO antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein sequence (within amino acids 150-250) from the human protein was used as the immunogen for the MPO antibody.

## Storage

Aliquot the MPO antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

