

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Myeloperoxidase/MPO in Western blots. No cross-reactivity with recombinant human Eosinophil Peroxidase is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 392105
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Myeloperoxidase/MPO Val279-Ser745 Accession # P05164
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Myeloperoxidase (MPO) is a hemeprotein that belongs to the XPO subfamily of the heme peroxidase superfamily. MPO is synthesized as a preproprotein that undergoes proteolytic processing to generate a disulfide-linked heterodimer of the N-terminal β-subunit (12 kDa) and C-terminal α subunit (60 kDa). Active MPO is a tetramer of two β-subunits and two α-subunits that are also disulfide-linked through the two α-subunits. MPO is stored in granules and is an abundant protein in neutrophils and monocytes. MPO is released upon activation to catalyze the formation of powerful oxidants such as hypochlorous acid, which kills microbes. Unprocessed pro-MPO can also be released. Human and mouse MPO share 87% amino acid sequence identity.

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