For Research Use Only

Mouse MPO Recombinant antibody, PBS Only

Catalog Number:84436-5-PBS



Basic Information

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AAR99349

Purification Method: Protein A purfication

Size: 1 mg/ml Source: GeneID (NCBI): 17523 UNIPROT ID:

GenBank Accession Number:

CloneNo.: 241839C11

Rabbit Isotype:

Full Name: myeloperoxidase Calculated MW:

81KD

P11247

Observed MW: 43 kDa, 59 kDa, 90 kDa

Applications

Tested Applications:

WB, IHC, IF-P, Indirect ELISA

Species Specificity:

human, mouse, rat

Background Information

The MPO gene encodes myeloperoxidase, a lysosomal hemoprotein located in the azurophilic granules of polymorphonuclear (PMN) leukocytes and monocytes. In response to stimulation, MPO is activated into a transient intermediate with potent antimicrobial oxidizing abilities(PMID:17650507). The mRNA is translated into a single protein of 90 kDa, which displays enzymatic activity and undergoes proteolytic maturation into a heavy chain of 59 kDa and a light chain of 13.5 kDa; these subunits then dimerize into the mature tetramer and the mature MPO is a heterotetramer composed of two identical heavy chains and two identical light chains(PMID:12773517). Fragments with molecular masses of 43-47 kDa were formed by autocatalysis during warming in sample buffer (PMID:12960244). The 24-kDa material had a map identical to that of 13.5 kDa subunit and represents a dimer of the 13.5 kDa subunit (PMID:3008892). Defects in MPO are the cause of myeloperoxidase deficiency (MPOD). It has 3 isoforms produced by alternative splicing.

Storage

Storage:

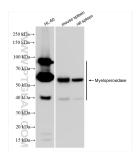
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

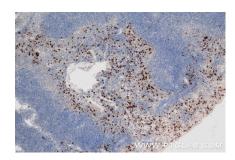
Storage Buffer:

PBS Only

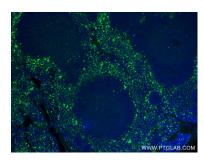
Selected Validation Data



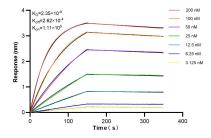
Various lysates were subjected to SDS PAGE followed by western blot with 84436-5-RR (MPO antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84436-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse spleen tissue slide using 84436-5-RR (MPO antibody) at dilution of 1:250 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84436-5-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using MPO antibody (84436-5-RR, Clone: 241839C11) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84436-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLL) kinetic assays of 84436-5-RR against Mouse Mpo were performed. The affinity constant is 23.5 nM.