For Research Use Only

MPO Polyclonal antibody

Catalog Number:32385-1-AP



Basic Information

Catalog Number: 32385-1-AP

Size: 500 ug/ml Source: Rabbit Isotype:

IgG

GenBank Accession Number:

AAR99349 GeneID (NCBI): 17523 **UNIPROT ID:** P11247 Full Name: myeloperoxidase Calculated MW:

Observed MW: 59 kDa

Purification Method:

Antigen affinity Purification Recommended Dilutions: WB 1:1000-1:8000 IF-P 1:50-1:500

Applications

Tested Applications: WB, IF-P, ELISA Species Specificity: mouse, rat

Positive Controls:

WB: mouse spleen tissue, rat spleen tissue

IF-P: mouse spleen tissue,

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 the 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. This antibody is specific to mouse MPO.

Storage

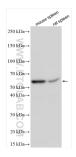
Storage:

Store at -20°C. Stable for one year after shipment.

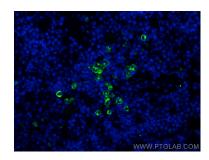
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 32385-1-AP (MPO antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using MPO antibody (32385-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).