For Research Use Only

MPO Recombinant antibody

Catalog Number:84436-4-RR



Basic Information

Catalog Number:

84436-4-RR

Size: 1000 μ g/ml AAR99349 GeneID (NCBI):

Source: UNIPROT ID: Rabbit P11247

Isotype: Full Name:
IgG myeloperoxidase
Calculated MW:

81KD

17523

GenBank Accession Number:

Purification Method:

Protein A purification

CloneNo.: 241839F3

Recommended Dilutions: IF-P 1:200-1:800

Applications

Tested Applications:

IF-P, ELISA

Species Specificity:

mouse

Positive Controls:

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 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:

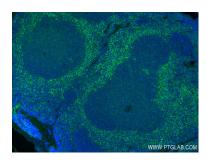
Store at -20°C. Stable for one year after shipment.

Storage Buffer

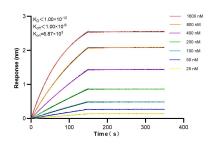
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using MPO antibody (84436-4-RR, Clone: 241839F3) 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).



Biolayer interferometry (BLL) kinetic assays of 84436-4-RR against Mouse Mpo were performed. The affinity constant is below 1 pM.