For Research Use Only

Mouse MPO Recombinant antibody, PBS Only (Detector)

Catalog Number:84436-4-PBS



Purification Method:

Protein A purification

CloneNo.:

241839F3

Basic Information

Catalog Number: 84436-4-PBS

Size: 1 mg/ml

Source:

Rabbit

GenBank Accession Number:

AAR99349

GeneID (NCBI):

17523

UNIPROT ID: P11247

Full Name: Isotype: myeloperoxidase

> Calculated MW: 81KD

Applications

Tested Applications:

IF-P, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

mouse

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.

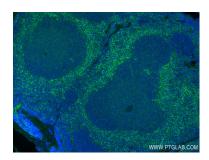
Storage

Storage:

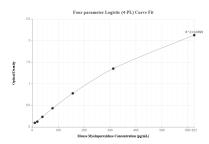
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only

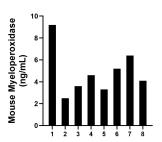
Selected Validation Data



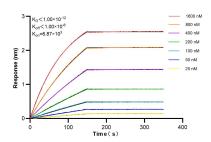
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using MPO antibody (84436-4-RR, Clone: 241839F3) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84436-4-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01284-4, Mouse MPO Recombinant Matched Antibody Pair -PBS only. 84436-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0702. 84436-4-PBS was HRP conjugated as the detection antibody. Range: 9.77-625 pg/mL



Serum of eight mice was measured. The mouse MPO concentration of detected samples was determined to be 4.86 ng/mL with a range of 2.54 - 9.19 ng/mL



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