For Research Use Only

Mouse MPO Recombinant antibody, PBS Only (Detector)

Catalog Number:84436-4-PBS

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
84436-4-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
AAR99349

GeneID (NCBI):
17523

UNIPROT ID:
P11247

Full Name:
myeloperoxidase

Calculated MW:
81KD

Purification Method:
Protein A purification

CloneNo.:
241839F3

Applications

Tested Applications:
IF-P, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
mouse

Product Information

84436-4-PBS targets MPO as part of a matched antibody pair:

MP01284-4: 84436-3-PBS capture and 84436-4-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

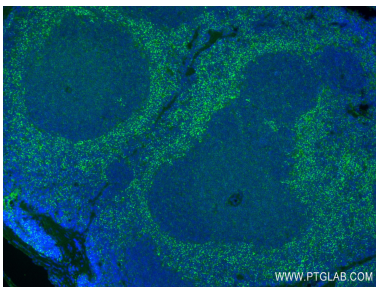
The MPO gene encodes myeloperoxidase, a lysosomal hemoprotein located in the azurophilic granules of polymorphonuclear (PMN) leukocytes and monocytes. In response to stimulation, MPO is activated into a transient intermediate with potent antimicrobial oxidizing abilities(PMID:17650507). The mRNA is translated 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

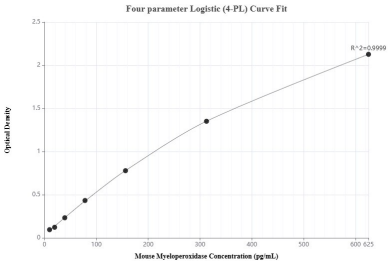
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

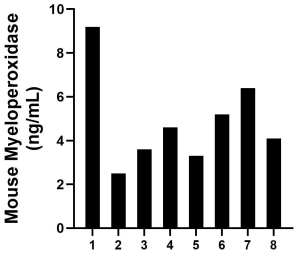
Selected Validation Data



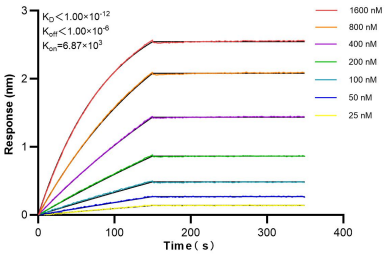
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using MPO antibody (84436-4-RR, Clone: 241839F3) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed 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 (BLI) kinetic assays of 84436-4-RR against Mouse Mpo were performed. The affinity constant is below 1 pM.