For Research Use Only

Biotin-conjugated MPO Polyclonal antibody

Catalog Number:Biotin-22225



Basic Information

Catalog Number: GenBank Accession Number:

Biotin-22225 BC130476
Size: GeneID (NCBI):

100ul , Concentration: 1000 ug/ml by 4353
Nanodrop; UNIPROT ID:
Source: P05164

Rabbit Full Name:
Isotype: myeloperoxidase
IgG Calculated MW:
Tmmunogen Catalog Number: 745 aa, 84 kDa
Observed MW:
59 kDa

Purification Method: Antigen affinity purification Recommended Dilutions: IF-P: 1:50-1:500

Excitation/Emission maxima wavelengths:

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Applications

Tested Applications:

IF-P, ELISA

Species Specificity: human, mouse, rat

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. This antibody is specific to MPO.

Storage

Storage

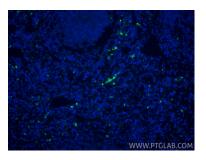
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using Biotin MPO antibody (Biotin-22225) at dilution of 1:200 and CoraLite® Plus 488-conjugated Streptavidin (PF00023). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).