For Research Use Only

## CoraLite® Plus 488-conjugated MPO Recombinant monoclonal antibody

www.ptglab.com

Catalog Number: CL488-81610 Featured Product

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-81610 BC130476 GeneID (NCBI): 100ul , Concentration: 1000  $\mu g/ml$  by 4353

Nanodrop: **UNIPROT ID:** P05164 Rabbit

Full Name: Isotype: myeloperoxidase IgG Calculated MW: Immunogen Catalog Number: 745 aa, 84 kDa AG17564

Observed MW: 59 kDa, 90 kDa

**Tested Applications:** 

human

**Purification Method:** 

Protein A purification

CloneNo.: 3J 17

Recommended Dilutions:

IF-P: 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

**Applications** 

IF-P

Species Specificity:

Positive Controls:

IF-P: human tonsillitis 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.

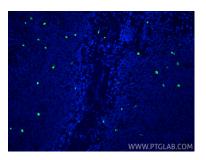
Storage

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

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 human tonsillitis tissue using CoraLite® Plus 488 MPO antibody (CL488-81610, Clone: 3J17) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).