For Research Use Only

CoraLite®594-conjugated MPO Monoclonal antibody

Catalog Number: CL594-66177

Featured Product

1 Publications



Basic Information

Catalog Number:

GenBank Accession Number:

Thiophilic affinity chromatograph

Excitation/Emission maxima

Purification Method:

CL594-66177

GeneID (NCBI):

CloneNo.:

100ul, Concentration: 1000 ug/ml by 4353

BC130476

4C11F6

Nanodrop:

UNIPROT ID:

Recommended Dilutions:

Mouse

P05164

IF-P: 1:50-1:500 FC (Intra): 0.80 ug per 10^6 cells in a 100 µl suspension

Full Name: myeloperoxidase

Isotype: IgA

Calculated MW:

745 aa, 84 kDa Observed MW:

wavelengths: 588 nm / 604 nm

AG17564

90 kDa

Applications

Tested Applications:

Immunogen Catalog Number:

IF-P, FC (Intra)

Cited Applications:

IF

Species Specificity:

human, rat

Cited Species:

human

Positive Controls:

IF-P: human appendicitis tissue, human liver tissue

FC (Intra): HL-60 cells,

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). 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.

Notable Publications

Author **Pubmed ID** Journal Application IF Xing Liu 37734390 Thromb Haemost

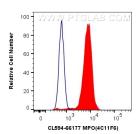
Storage

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

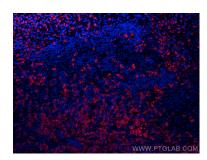
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

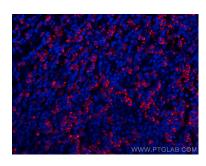
Selected Validation Data



1X10^6 HL-60 cells were intracellularly stained with 0.8 ug CoraLite®594 Anti-Human MPO (CL594-66177, Clone:4C11F6) (red), or 0.8 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human appendicitis tissue using CoraLite®594 MPO antibody (CL594-66177, Clone: 4C11F6) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human appendicitis tissue using CoraLite®594 MPO antibody (CL594-66177, Clone: 4C11F6) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).