

CoraLite®594-conjugated HO-1/HMOX1 Monoclonal antibody

Catalog Number: **CL594-66743**

Basic Information

Catalog Number:

CL594-66743

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG21296

GenBank Accession Number:

BC001491

GeneID (NCBI):

3162

UNIPROT ID:

P09601

Full Name:

heme oxygenase (decycling) 1

Calculated MW:

33 kDa

Observed MW:

33 kDa

Purification Method:

Protein A purification

CloneNo.:

2D10A5

Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima wavelengths:

588 nm / 604 nm

Applications

Tested Applications:

IF-P, FC (Intra)

Species Specificity:

human, mouse, rat, pig

Positive Controls:

IF-P: mouse spleen tissue, human liver tissue

Background Information

Heme oxygenase (HMOX1) catalyzes the first and rate-limiting step in the degradation of heme to yield equimolar quantities of biliverdin Ixa, carbon monoxide (CO), and iron. It has 3 isoforms: HO-1 is highly inducible, whereas HO-2 and HO-3 are constitutively expressed (PMID:10194478). Heme oxygenase-1 (HO-1) is expressed in many tissues and vascular smooth muscle cells, and endothelial cells (PMID:15451051) and has been identified as an important endogenous protective factor induced in many cell types by various stimulants, such as hemolysis, inflammatory cytokines, oxidative stress, heat shock, heavy metals, and endotoxin (PMID: 11522663). And the full-length HO-1 is very unstable and susceptible to truncation that generates an inactive, soluble form (28 kDa) (James R. Reed, Pharmacology, 535-568).

Storage

Storage:

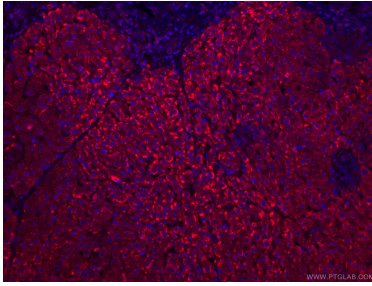
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

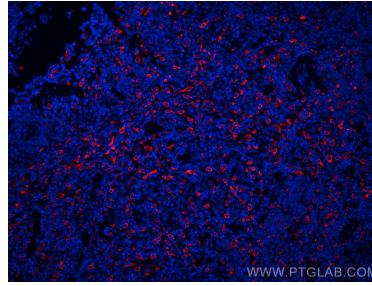
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

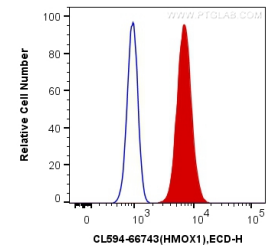
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human liver tissue using Coralite®594-conjugated HO-1/HMOX1 antibody (CL594-66743, Clone: 2D10A5) at dilution of 1:100.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using Coralite®594 HO-1/HMOX1 antibody (CL594-66743, Clone: 2D10A5) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HeLa cells were intracellularly stained with 0.2 ug Coralite®594 Anti-Human HO-1/HMOX1 (CL594-66743, Clone:2D10A5) (red), or 0.2 ug Mouse IgG2a Isotype Control (CL594-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).