

For Research Use Only

# HO-1/HMOX1 Monoclonal antibody

Catalog Number: 66743-1-Ig

Featured Product

142 Publications



## Basic Information

**Catalog Number:**

66743-1-Ig

**GenBank Accession Number:**

BC001491

**Purification Method:**

Protein A purification

**Size:**

150ul, Concentration: 1000 ug/ml by Nanodrop;

**GeneID (NCBI):**

3162

**CloneNo.:**

2D10A5

**Source:**

Mouse

**UNIPROT ID:**

P09601

**Recommended Dilutions:**

WB 1:1000-1:6000

IHC 1:500-1:2000

IF-P 1:200-1:800

FC (Intra) 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

**Isotype:**

IgG2a

**Full Name:**

heme oxygenase (decycling) 1

**Calculated MW:**

33 kDa

**Observed MW:**

33 kDa

**Immunogen Catalog Number:**

AG21296

## Applications

**Tested Applications:**

WB, IHC, IF-P, FC (Intra), ELISA

**Cited Applications:**

WB, IHC, IF, IP, CoIP

**Species Specificity:**

human, mouse, rat, pig, rabbit

**Cited Species:**

human, mouse, rat, pig, sheep

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HEK-293 cells, A549 cells, pig spleen tissue, HepG2 cells, HeLa cells, HSC-T6 cells, rat liver tissue, rat spleen tissue, pig liver tissue, rabbit liver tissue

**IHC:** human liver cancer tissue, human renal cell carcinoma tissue, human kidney tissue

**IF-P:** mouse spleen tissue, rat liver tissue

**FC (Intra):** HeLa cells,

## 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).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jinliang Liu	34630847	Oxid Med Cell Longev	WB
Katarzyna Magierowska	31568823	Free Radic Biol Med	IHC
Zi-Chao Wang	36163178	Cell Death Dis	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

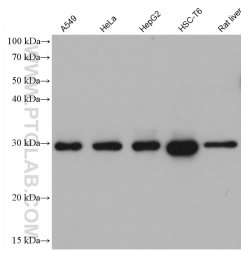
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

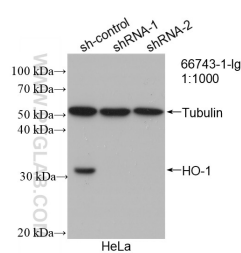
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

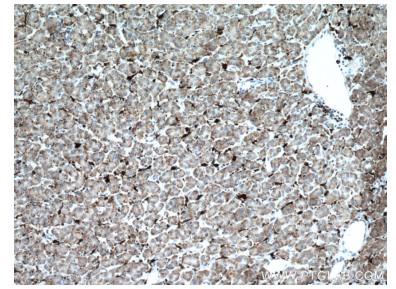
## Selected Validation Data



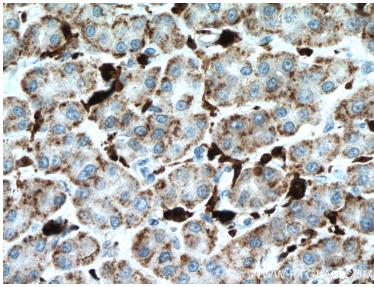
Various lysates were subjected to SDS PAGE followed by western blot with 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



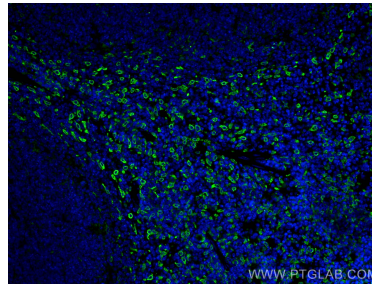
WB result of HO-1/HMOX1 antibody (66743-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HO-1/HMOX1 transfected HeLa cells.



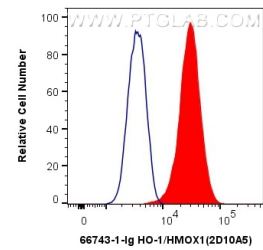
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



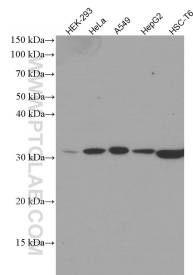
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



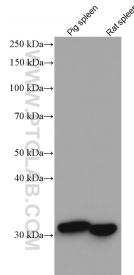
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using HO-1/HMOX1 antibody (66743-1-Ig, Clone: 2D10A5) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug HO-1/HMOX1 Monoclonal antibody (66743-1-Ig, Clone:2D10A5) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L)(red), or 0.4 ug Mouse IgG2a Isotype Control (C1.18.4) (65208-1-Ig, Clone: C1.18.4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 66743-1-Ig (HO-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 66743-1-Ig (HO-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.