

For Research Use Only

HO-1/HMOX1 Monoclonal antibody



Catalog Number: 66743-1-Ig

Featured Product

103 Publications

Basic Information

Catalog Number: 66743-1-Ig	GenBank Accession Number: BC001491	Purification Method: Protein A purification
Size: 150ul, Concentration: 1000 µg/ml by Nanodrop and 523 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 3162	CloneNo.: 2D10A5
Source: Mouse	UNIPROT ID: P09601	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:500-1:2000 IF 1:200-1:800
Isotype: IgG2a	Full Name: heme oxygenase (decycling) 1	
Immunogen Catalog Number: AG21296	Calculated MW: 33 kDa	
	Observed MW: 33 kDa	

Applications

Tested Applications:

WB, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, IHC, CoIP

Species Specificity:

Human, Mouse, Rat, Pig, Rabbit

Cited Species:

human, rat, sheep, mouse, pig

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 : mouse spleen tissue, rat 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).

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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

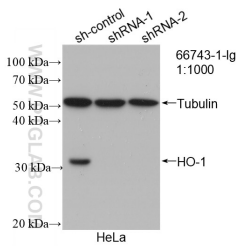
For technical support and original validation data for this product please contact:

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

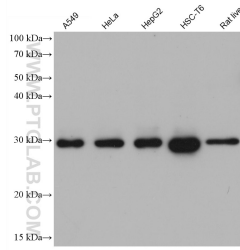
E: proteintech@ptglab.com
W: ptglab.com

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

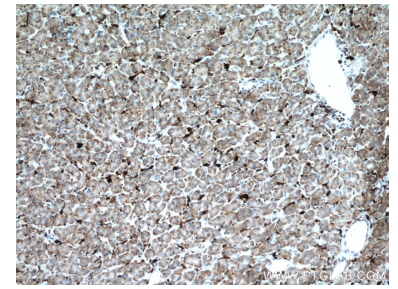
Selected Validation Data



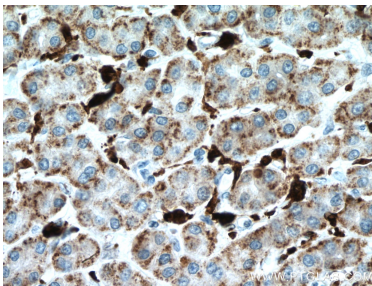
WB result of HO-1/HMOX1 antibody (66743-1-Ig; 1:1000); incubated at room temperature for 1.5 hours with sh-Control and sh-HO-1/HMOX1 transfected HeLa cells.



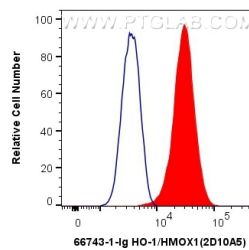
Various lysates were subjected to SDS PAGE followed by western blot with 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



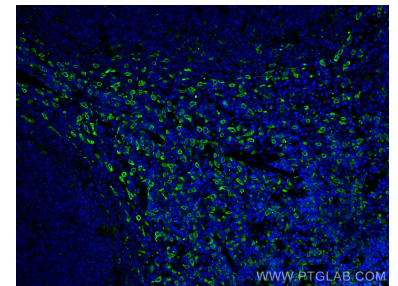
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



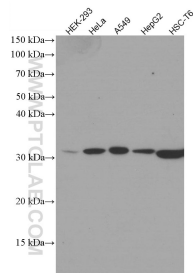
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



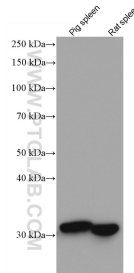
1×10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human HO-1/HMOX1 (66743-1-Ig, Clone: 2D10A5) and Coralite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (C1.18.4) (65208-1-Ig, Clone: C1.18.4) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed mouse spleen tissue using HO-1/HMOX1 antibody (66743-1-Ig, Clone: 2D10A5) at dilution of 1:400 and Coralite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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.