For Research Use Only

HO-1/HMOX1 Monoclonal antibody

Catalog Number:66743-1-Ig Featured Product 144 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66743-1-Ig

Concentration:
1000 ug/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:
WB 1:1000-1:6000
IHC 1:500-1:2000
IF-P 1:200-1:800
FC (Intra) 0.40 ug per 10^6 cells in a 100 µl suspension

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, infiammatory 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

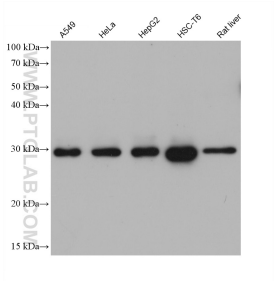
Author	Pubmed ID	Journal	Application
Jinliang Liu	34630847	Oxid Med Cell Longev	WB
Katarzyna Magierowska	31568823	Free Radic Biol Med	IHC
Zi-Chao Wang	36163178	Cell Death Dis	WB

Storage

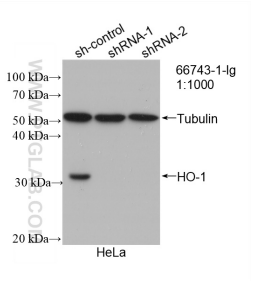
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

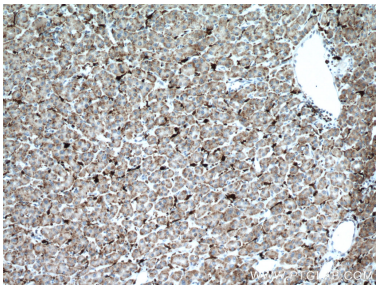
Selected Validation Data



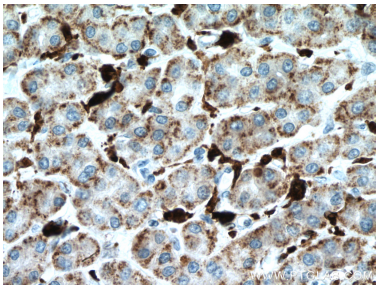
Various lysates were subjected to SDS PAGE followed by western blot with 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



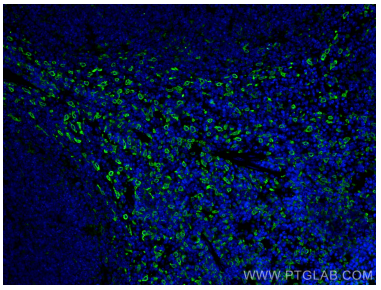
WB result of HO-1/HMOX1 antibody (66743-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HO-1/HMOX1 transfected HeLa cells.



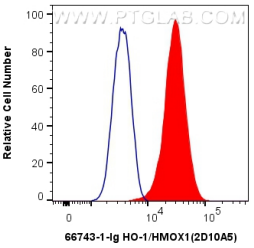
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



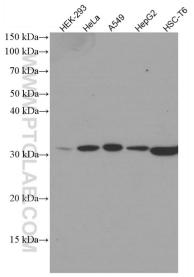
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66743-1-Ig (HO-1/HMOX1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



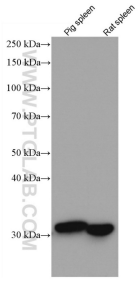
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using HO-1/HMOX1 antibody (66743-1-Ig, Clone: 2D10A5) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 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.