

For Research Use Only

# HO-1/HMOX1 Polyclonal antibody

Catalog Number: 10701-1-AP

Featured Product

1261 Publications



## Basic Information

### Catalog Number:

10701-1-AP

### Concentration:

800 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1190

### GenBank Accession Number:

BC001491

### GeneID (NCBI):

3162

### UNIPROT ID:

P09601

### Full Name:

heme oxygenase (decycling) 1

### Calculated MW:

33 kDa

### Observed MW:

28-33 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF-P: 1:50-1:500

IF-Fro: 1:50-1:500

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

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, monkey, chicken, bovine, goat

**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: HeLa cells, HepG2 cells, mouse spleen tissue, rat spleen tissue, L02 cells

IP: HeLa cells,

IHC: mouse spleen tissue,

IF-P: mouse spleen tissue,

IF-Fro: mouse spleen 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
Yanan Zhao	36166594	J Agric Food Chem	WB
Guangping Lu	36235670	Nutrients	WB, IF
Zhenmao Jia	36238566	Front Pharmacol	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:

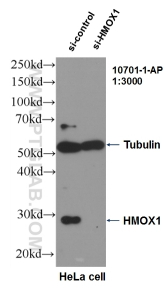
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

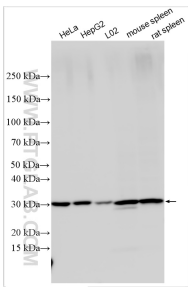
W: [ptgcn.com](http://ptgcn.com)

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

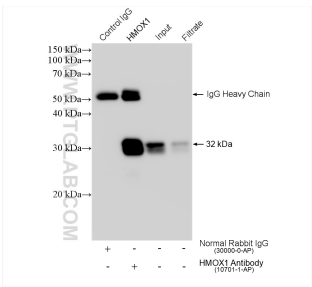
Selected Validation Data



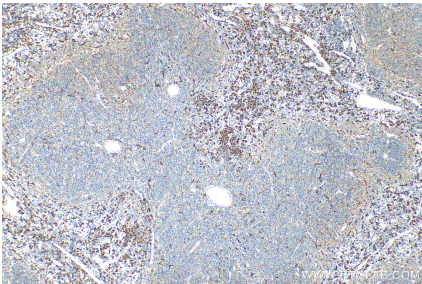
WB result of HMOX1 antibody (10701-1-AP, 1:3000) with si-Control and si-HMOX1 transfected HeLa cells.



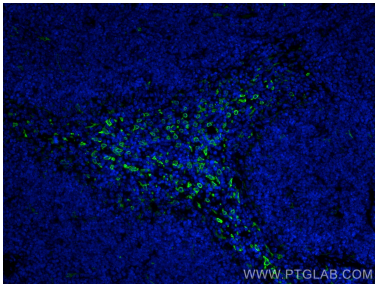
Various lysates were subjected to SDS PAGE followed by western blot with 10701-1-AP (HO-1/HMOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



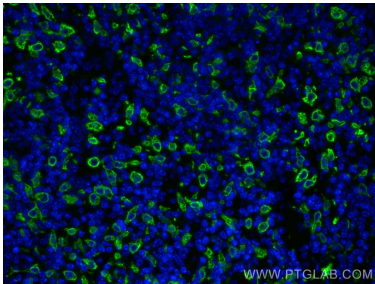
IP result of anti-HO-1/HMOX1 (IP:10701-1-AP, 4ug; Detection:10701-1-AP 1:20000) with HeLa cells lysate 1360 ug.



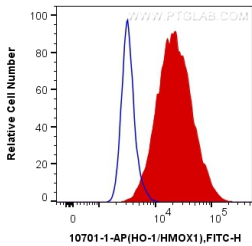
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 10701-1-AP (HO-1/HMOX1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



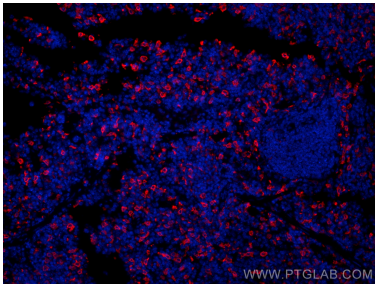
Immunofluorescent analysis of (4% PFA) fixed mouse spleen tissue using HO-1/HMOX1 antibody (10701-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



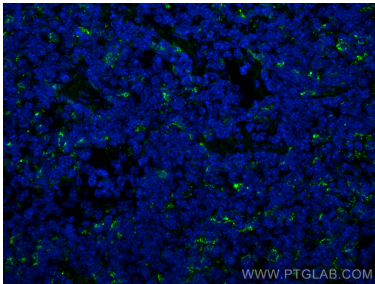
Immunofluorescent analysis of (4% PFA) fixed mouse spleen tissue using HO-1/HMOX1 antibody (10701-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human HO-1/HMOX1 (10701-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using HO-1/HMOX1 antibody (10701-1-AP) at dilution of 1:200 and CoraLite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of frozen OCT-embedded mouse spleen tissue using HO-1/HMOX1 antibody (10701-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).