HO-1/HMOX1
Polyclonal ANTIBODY
Catalog Number: 10701-1-AP

Basic Information

Catalog Number: 10701-1-AP
Size: 59 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG1190

GenBank Accession Number: BC001491
GeneID (NCBI): 3162
Full Name: heme oxygenase (decycling) 1
Calculated MW: 33 kDa
Observed MW: 28-33 kDa

Recommended Dilutions:
WB: 1:500-1:2000
IP: 0.5-4.0 ug for IP and 1:100-1:2000 for WB
IHC: 1:100-1:400
IF: 1:20-1:200

Applications

Tested Applications:
IF, IHC, IP, WB, ELISA
Cited Applications:
IF, IHC, WB
Species Specificity:
human, mouse, rat
Cited Species:
human, mouse, rat

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

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<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
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<tbody>
<tr>
<td>Yong Tao</td>
<td>26048465</td>
<td>Int J Oncol</td>
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<tr>
<td>Lu Lu</td>
<td>27903226</td>
<td>Free Radic Biol Med</td>
<td>WB</td>
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<tr>
<td>Song G G</td>
<td>19403515</td>
<td>J Clin Pathol</td>
<td>WB</td>
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Storage

Store at -20°C. Stable for one year after shipment.
Storage Buffer: PBS with 0.01% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (toll free in USA), or (312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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**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 (HMOX1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

IP Result of anti-HMOX1 (IP:10701-1-AP, 3ug; Detection: 10701-1-AP 1:1000) with HeLa cells lysate 300ug.

Immunohistochemistry of paraffin-embedded human liver cancer tissue slide using 10701-1-AP (HMOX1 antibody at dilution of 1:200 (under 10x lens). heat mediated antigen retrieved with Tris-EDTA buffer(pH9).

Immunohistochemistry of paraffin-embedded human liver cancer tissue slide using 10701-1-AP (HMOX1 antibody at dilution of 1:200 (under 40x lens). heat mediated antigen retrieved with Tris-EDTA buffer(pH9).

Immunofluorescent analysis of (-20 ethanol) fixed HT-1080 cells using 10701-1-AP (HMOX1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).