**HO-1/HMOX1**

**Polyclonal ANTIBODY**

**Catalog Number:** 10701-1-AP

**Featured Product**

92 Publications

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**Basic Information**

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>10701-1-AP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size:</strong></td>
<td>59 μg/150 μl</td>
</tr>
<tr>
<td><strong>Source:</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>IgG Isotype:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Purification Method:</strong></td>
<td>Antigen affinity purification</td>
</tr>
<tr>
<td><strong>Immunogen Catalog Number:</strong></td>
<td>AG1190</td>
</tr>
<tr>
<td><strong>GenBank Accession Number:</strong></td>
<td></td>
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<tr>
<td><strong>GeneID (NCBI):</strong></td>
<td>3162</td>
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<tr>
<td><strong>Full Name:</strong></td>
<td>heme oxygenase (decrecycling) 1</td>
</tr>
<tr>
<td><strong>Calculated MW:</strong></td>
<td>33 kDa</td>
</tr>
<tr>
<td><strong>Observed MW:</strong></td>
<td>28-33 kDa</td>
</tr>
</tbody>
</table>

**Recommended Dilutions:**

- **WB:** 1:1000-1:5000
- **IP:** 0.5-4.0 μg for IP and 1:50:1-2000 for WB
- **IHC:** 1:100-1:400
- **IF:** 1:20-1:200

**Applications**

- **Tested Applications:** IF, IHC, IP, WB, ELISA
- **Cited Applications:** IF, IHC, IP, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** human, mouse, rat
- **Note:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**

- **WB:** rat spleen tissue; HT-1080 cells, mouse liver tissue, Hela cells, HepG2 cells
- **IP:** Hela cells;
- **IHC:** human liver cancer tissue, human kidney tissue
- **IF:** HT-1080 cells;

**Background Information**

Heme oxygenase (HMOX1) catalyzes the first and rate-limiting step in the degradation of heme to yield equimolar quantities of biliverdin isoa, 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**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yong Tao</td>
<td>29048945</td>
<td>Int J Oncol</td>
<td>WB</td>
</tr>
<tr>
<td>Lu Lu</td>
<td>27936226</td>
<td>Free Radic Biol Med</td>
<td>WB</td>
</tr>
<tr>
<td>Song G G</td>
<td>19430515</td>
<td>J Clin Pathol</td>
<td>WB</td>
</tr>
</tbody>
</table>

**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.1% sodium azide and 50% glycerol pH 7.3
- **Aliquoting is unnecessary for -20°C storage**

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

T 1 (888) 47PTGLAB (1-888-478-4522) (toll free in USA), or (312) 455-8498 (outside USA)

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W ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
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 3000ug.

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 All-in-One Goat Anti-Rabbit Igd (H+L).