**Basic Information**

- **Catalog Number:** 27282-1-AP
- **GenBank Accession Number:** BC001491
- **Recommended Dilutions:**
  - WB: 1:500-1:1000
  - IHC: 1:50-1:500
- **Size:** 30 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG26172
- **Gene ID (NCBI):** 3162
- **Full Name:** heme oxygenase (decycling) 1
- **Calculatd MW:** 33 kDa
- **Observed MW:** 33 kDa

**Applications**

- **Tested Applications:** IHC, WB, ELISA
- **Cited Applications:** WB
- **Species Specificity:** human, mouse
- **Cited Species:** human, mouse, pig, rat

**Note:** suggested antigen retrieval with TE buffer pH 9.5. (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**
- **WB:** mouse spleen tissue; A549 cells
- **IHC:** human kidney 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**

<table>
<thead>
<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Yixuan Sun</td>
<td>28900335</td>
<td>Sci Rep</td>
<td>WB</td>
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<td>Zhengnan Ren</td>
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<td>Ameng Shi</td>
<td>26128856</td>
<td>Int Immunopharmacol</td>
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**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:**

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W: ptglab.com

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mouse spleen tissue were subjected to SDS PAGE followed by western blot with 27282-1-AP (HO-1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

Immunohistochemistry of paraffin-embedded human kidney tissue slide using 27282-1-AP (HO-1 antibody) at dilution of 1:200 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded human kidney tissue slide using 27282-1-AP (HO-1 antibody) at dilution of 1:200 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).