Basic Information

- **Catalog Number:** 27282-1-AP
- **Size:** 150μl, Concentration: 400 μg/ml by Nanodrop and 200 μg/ml by Bradford method using BSA as the standard
- **Source:** Rabbit
- **Isotype:** IgG
- **Immunogen Catalog Number:** AG26172
- **Genbank Accession Number:** BC001691
- **GeneID (NCBI):** 3162
- **Full Name:** heme oxygenase (decycling) 1
- **Calculated MW:** 33 kDa
- **Observed MW:** 33 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:**
  - WB: 1:500-1:3000
  - IHC: 1:200-1:1000

Applications

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

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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>
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<tr>
<td>Dan Tang</td>
<td>34815154</td>
<td>Phytomedicine</td>
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<tr>
<td>Lu Wang</td>
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<td>Int Immunopharmacol</td>
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<td>Jian Chen</td>
<td>36187836</td>
<td>Front Vet Sci</td>
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Storage

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

*** 20μl sizes contain 0.1% BSA
HeLa cells were subjected to SDS PAGE followed by western blot with 27282-1-AP (HO-1/HMOX1 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis 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 retrieval with Tris-EDTA buffer (pH 9.0).