

**HMOX1 / HO-1 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS15723****Specification**

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**HMOX1 / HO-1 Antibody - Product Information**

Application	<b>IHC, WB</b>
Primary Accession	<a href="#">P09601</a>
Reactivity	<b>Human, Mouse, Rat, Dog</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>33kDa KDa</b>

**HMOX1 / HO-1 Antibody - Additional Information****Gene ID** 3162**Other Names**

Heme oxygenase 1, HO-1, 1.14.99.3, HMOX1, HO, HO1

**Target/Specificity**

Detect an ~32kD protein, corresponding to the molecular mass of HO-1 on SDS Page Western Blots.

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

HMOX1 / HO-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**HMOX1 / HO-1 Antibody - Protein Information****Name** HMOX1**Synonyms** HO, HO1**Function**

[Heme oxygenase 1]: Catalyzes the oxidative cleavage of heme at the alpha-methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while releasing the central heme iron chelate as ferrous iron (PubMed:[11121422](http://www.uniprot.org/citations/11121422)), PubMed:[19556236](http://www.uniprot.org/citations/19556236), PubMed:[7703255](http://www.uniprot.org/citations/7703255)). Affords protection against programmed cell death and this cytoprotective effect relies on its ability to catabolize free heme and prevent it from sensitizing cells to undergo apoptosis (PubMed:[20055707](http://www.uniprot.org/citations/20055707)).

**Cellular Location**

Endoplasmic reticulum membrane; Single-pass type IV membrane protein; Cytoplasmic side

**Tissue Location**

Expressed at higher levels in renal cancer tissue than in normal tissue (at protein level)

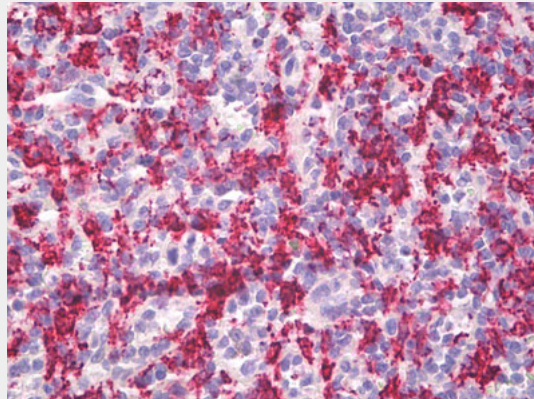
**Volume**

50  $\mu$ l

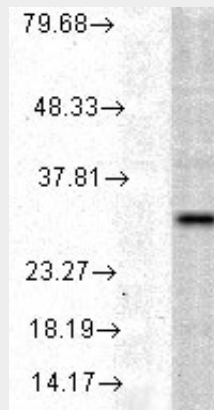
**HMOX1 / HO-1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**HMOX1 / HO-1 Antibody - Images**

Anti-HMOX1 / HO-1 antibody IHC staining of human spleen, macrophages.



HO-1, Human cell line mix.

**HMOX1 / HO-1 Antibody - Background**

Heme oxygenase cleaves the heme ring at the alpha methene bridge to form biliverdin. Biliverdin is subsequently converted to bilirubin by biliverdin reductase. Under physiological conditions, the activity of heme oxygenase is highest in the spleen, where senescent erythrocytes are sequestered and destroyed. Exhibits cytoprotective effects since excess of free heme sensitizes cells to undergo apoptosis.

**HMOX1 / HO-1 Antibody - References**

- Yoshida T., et al. Eur. J. Biochem. 171:457-461(1988).  
Collins J.E., et al. Genome Biol. 5:R84.1-R84.11(2004).  
Dunham I., et al. Nature 402:489-495(1999).  
Keyse S.M., et al. Proc. Natl. Acad. Sci. U.S.A. 86:99-103(1989).  
Shibahara S., et al. Eur. J. Biochem. 179:557-563(1989).