

**Anti-HO-1/HMOX1 Antibody**  
Catalog # ABO11903**Specification**

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

Application	WB, IHC
Primary Accession	<a href="#">P09601</a>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Heme oxygenase 1(HMOX1) detection. Tested with WB, IHC-P in Human;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-HO-1/HMOX1 Antibody - Additional Information**

**Gene ID** 3162

**Other Names**

Heme oxygenase 1, HO-1, 1.14.14.18, HMOX1, HO, HO1

**Calculated MW**

32819 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Subcellular Localization**

Microsome . Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side .

**Tissue Specificity**

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

**Protein Name**

Heme oxygenase 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human HMOX1 recombinant protein (Position: M1-M288). Human HMOX1 shares 82% and 80% amino acid (aa) sequences identity with mouse and rat HMOX1, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the heme oxygenase family.

**Anti-HO-1/HMOX1 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

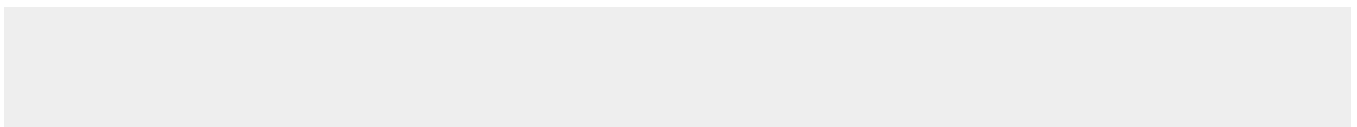
**Tissue Location**

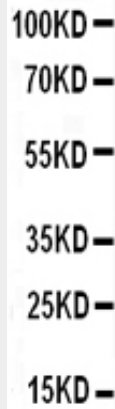
Expressed at higher levels in renal cancer tissue than in normal tissue (at protein level)

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

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

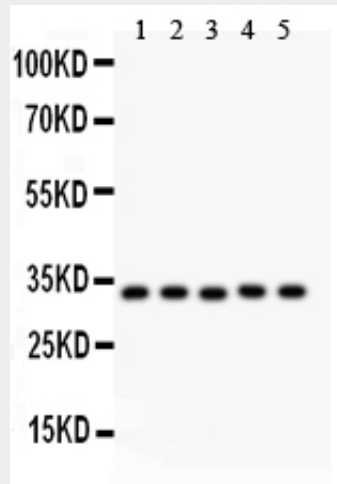
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



100KD -  
70KD -  
55KD -  
35KD -  
25KD -  
15KD -

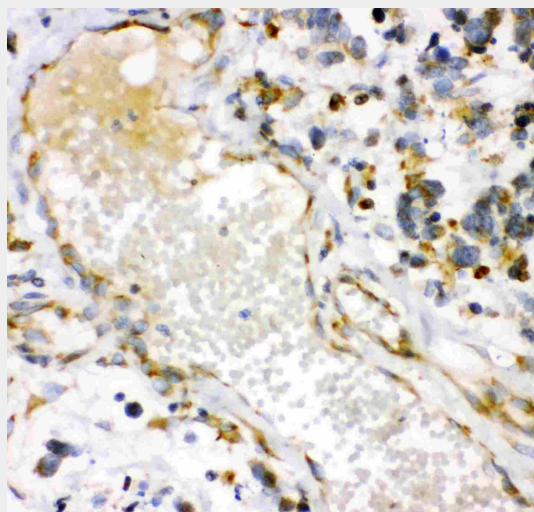
Anti- HMOX1 antibody, ABO11903, Western blotting All lanes: Anti HMOX1 (ABO11903) at 0.5ug/ml WB: Recombinant Human HMOX1 Protein 0.5ng Predicted bind size: 37KD Observed bind size: 37KD



100KD -  
70KD -  
55KD -  
35KD -  
25KD -  
15KD -

1 2 3 4 5

Anti- HMOX1 antibody, ABO11903, Western blotting All lanes: Anti HMOX1 (ABO11903) at 0.5ug/ml Lane 1: Human Placenta Tissue Lysate at 50ug Lane 2: Rat Spleen Tissue Lysate at 50ug Lane 3: A549 Whole Cell Lysate at 40ug Lane 4: PANC Whole Cell Lysate at 40ug Lane 5: HELA Whole Cell Lysate at 40ug Predicted bind size: 33KD Observed bind size: 33KD



Anti- HMOX1 antibody, ABO11903, IHC(P) IHC(P): Human Lung Cancer Tissue

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

HMOX1 (heme oxygenase (decycling) 1), also known as HO-1, is a human gene that encodes for the enzyme heme oxygenase 1. It is an essential enzyme in heme catabolism, it cleaves heme to form biliverdin. HMOX1 belongs to the heme oxygenase family. The HMOX1 gene is located on the long (q) arm of chromosome 22 at position 12.3, from base pair 34,101,636 to base pair 34,114,748. HMOX1, an essential enzyme in heme catabolism, cleaves heme to form biliverdin, which is subsequently converted to bilirubin by biliverdin reductase, and carbon monoxide, a putative neurotransmitter. HMOX1 activity is induced by its substrate heme and by various nonheme substances.