

# Rabbit Anti-Heme Oxygenase Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52105

### **Specification**

# Rabbit Anti-Heme Oxygenase Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality

Antigen Region

WB, IHC-P P09601

Human, Mouse, Rat

Rabbit Polyclonal

human HO-1:101-200/288

## Rabbit Anti-Heme Oxygenase Polyclonal Antibody - Additional Information

**Gene ID** 3162

#### **Other Names**

HO-1; HSP32; HMOX1D; bK286B1; Heme oxygenase 1; HMOX1; HO; HO1

### **Dilution**

<span class ="dilution\_WB">WB~~1:100~1:500</span><br \> <span class ="dilution\_IHC-P">IHC-P~~1:100~1:500</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# Rabbit Anti-Heme Oxygenase Polyclonal 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:<a

href="http://www.uniprot.org/citations/7703255" target="\_blank">7703255</a>, PubMed:<a href="http://www.uniprot.org/citations/11121422" target="\_blank">11121422</a>, PubMed:<a href="http://www.uniprot.org/citations/19556236" target="\_blank">19556236</a>). 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:<a href="http://www.uniprot.org/citations/20055707" target="\_blank">20055707</a>).



### **Cellular Location**

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

#### **Tissue Location**

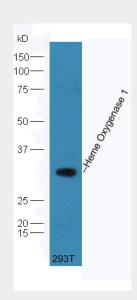
Expressed at higher levels in renal cancer tissue than in normal tissue (at protein level)

## Rabbit Anti-Heme Oxygenase Polyclonal Antibody - Protocols

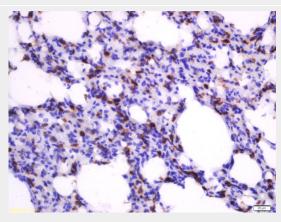
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Rabbit Anti-Heme Oxygenase Polyclonal Antibody - Images



293T cell lysate probed (AP52105) at 1:300 overnight in  $4^{\circ}$ C. Followed by conjugation to the secondary antibody at 1:5000 90min in  $37^{\circ}$ C.







Tel: 858.875.1900 Fax: 858.875.1999

Paraformaldehyde-fixed, paraffin embedded rat lung tissue; Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (normal goat serum) at 37°C for 20min; Antibody incubation with Rabbit Anti-Heme Oxygenase Polyclonal Antibody, Unconjugated AP52105 at 1:500 overnight at 4°C, followed by a conjugated secondary and DAB staining

# Rabbit Anti-Heme Oxygenase Polyclonal 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 sequestrated and destroyed. Exhibits cytoprotective effects since excess of free heme sensitizes cells to undergo apoptosis.