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# HMOX1 Antibody (Center)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP11240c**

## Specification

### HMOX1 Antibody (Center) - Product Information

| | |
|---|---|
| Application | **WB, FC,E** |
| Primary Accession | P09601 |
| Other Accession | NP_002124.1 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **32819** |
| Antigen Region | **177-204** |

### HMOX1 Antibody (Center) - Additional Information

**Gene ID** 3162

**Other Names**
Heme oxygenase 1, HO-1, HMOX1, HO, HO1

**Target/Specificity**
This HMOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-204 amino acids from the Central region of human HMOX1.

**Dilution**
WB~~1:1000
FC~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
HMOX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### HMOX1 Antibody (Center) - 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, PubMed:19556236, PubMed: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).

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

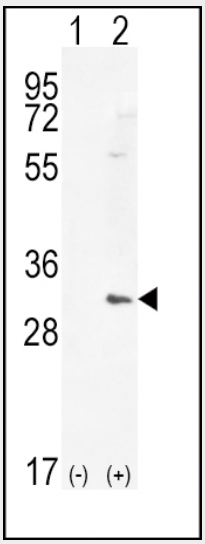
**Tissue Location**
Expressed at higher levels in renal cancer tissue than in normal tissue (at protein level)

## HMOX1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## HMOX1 Antibody (Center) - Images




Western blot analysis of HMOX1 (arrow) using rabbit polyclonal HMOX1 Antibody (Center) (Cat. #AP11240c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the HMOX1 gene.

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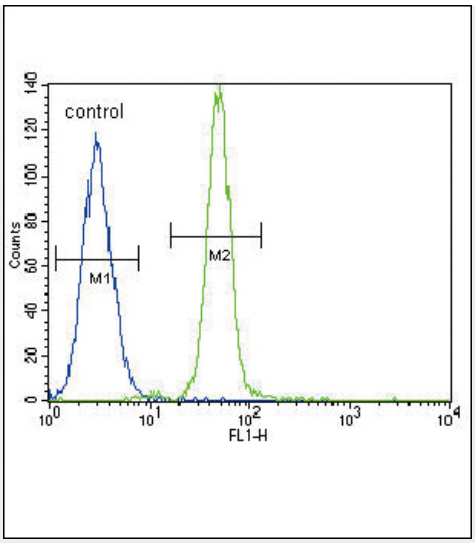


HMOX1 Antibody (Center) (Cat. #AP11240c) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**HMOX1 Antibody (Center) - Background**

Heme oxygenase, 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. Heme oxygenase activity is induced by its substrate heme and by various nonheme substances. Heme oxygenase occurs as 2 isozymes, an inducible heme oxygenase-1 and a constitutive heme oxygenase-2. HMOX1 and HMOX2 belong to the heme oxygenase family.

**HMOX1 Antibody (Center) - References**

Wu, M.M., et al. Toxicol. Appl. Pharmacol. 248(3):226-233(2010)
Bolisetty, S., et al. J. Am. Soc. Nephrol. 21(10):1702-1712(2010)
Bao, W., et al. PLoS ONE 5 (8), E12371 (2010) :
Wu, M.M., et al. J. Biomed. Sci. 17, 70 (2010) :
Wang, X., et al. PLoS ONE 5 (8), E11934 (2010) :

**HMOX1 Antibody (Center) - Citations**

- Fasudil Enhances Therapeutic Efficacy of Neural Stem Cells in the Mouse Model of MPTP-Induced Parkinson\'s Disease.