

HMOX1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11240c

Specification

HMOX1 Antibody (Center) - Product Information

FC, WB,E
<u>P09601</u>
<u>NP_002124.1</u>
Human
Rabbit
Polyclonal
Rabbit IgG
32819
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 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

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:<u>11121422</u>, PubMed:<u>19556236</u>, PubMed:<u>7703255</u>). 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:<u>20055707</u>).

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.

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

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.





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 <u>MPTP-Induced Parkinson\'s Disease.</u>