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

Specification

HMOX1 / HO-1 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P09601
Reactivity	**Human, Mouse, Rat, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

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:7703255, PubMed:11121422, PubMed:19556236). 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)

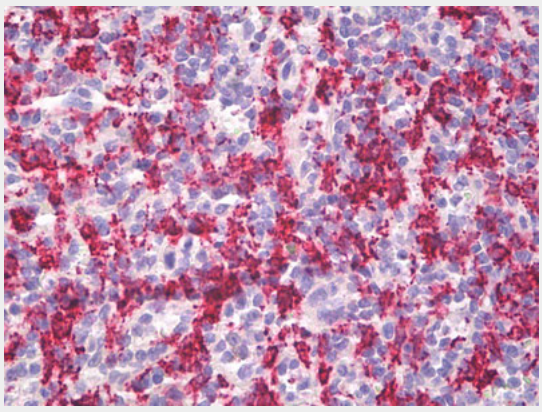
Volume
50 µl

HMOX1 / HO-1 Antibody - Protocols

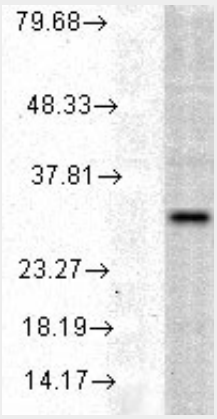
Provided below are standard protocols that you may find useful for product applications.

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

HMOX1 / HO-1 Antibody - Images



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



HO-1, Human cell line mix.

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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 sequestrated 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).