10320 Camino Santa Fe, Suite G
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Anti-HO-1/HMOX1 Antibody
Catalog # ABO11903

Specification

Anti-HO-1/HMOX1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P09601
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
Western blot, 0.1-0.5 µg/ml, Human, Rat

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 Na2HPO4, 0.05mg NaN3.

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 r˚Constitution, 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, 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)

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 Cytomety
- Cell Culture

Anti-HO-1/HMOX1 Antibody - Images

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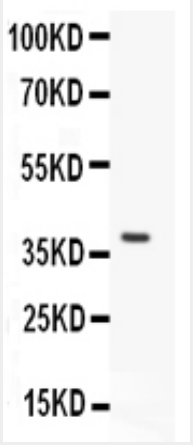
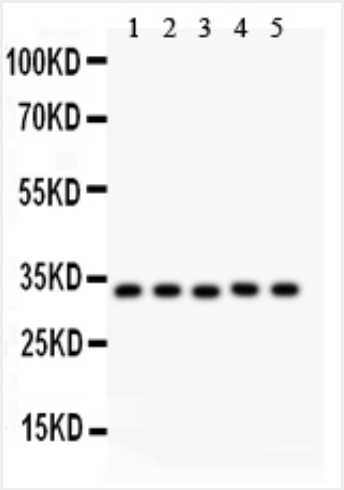
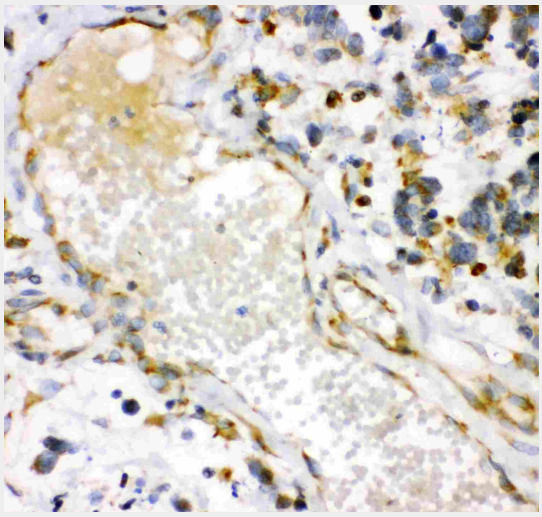


Anti- HMOX1 antibody, ABO11903, Western blottingAll lanes: Anti HMOX1 (ABO11903) at 0.5ug/mlWB: Recombinant Human HMOX1 Protein 0.5ngPredicted bind size: 37KDObserved bind size: 37KD



Anti- HMOX1 antibody, ABO11903, Western blottingAll lanes: Anti HMOX1 (ABO11903) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: Rat Spleen Tissue Lysate at 50ugLane 3: A549 Whole Cell Lysate at 40ugLane 4: PANC Whole Cell Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugPredicted bind size: 33KDObserved bind size: 33KD



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

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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.