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Anti-HO-1/HMOX1 Antibody

Catalog # ABO11903

Product Information

Application	WB, IHC-P
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.

Additional Information

Gene ID	3162
Other Names	Heme oxygenase 1, HO-1, 1.14.14.18, HMOX1, HO, HO1
Calculated MW	32819
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/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). .
Source	Eukaryota
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.

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)

Background

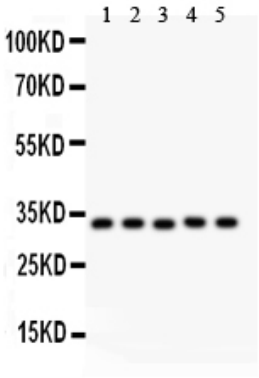
HMOX1 (heme oxygenase (decycling) 1), also known as HO-1, is a human gene that encodes for the enzyme heme oxygenase 1. It is an essential enzyme in heme catabolism, it cleaves heme to form biliverdin. HMOX1 belongs to the heme oxygenase family. The HMOX1 gene is located on the long (q) arm of chromosome 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.

Images

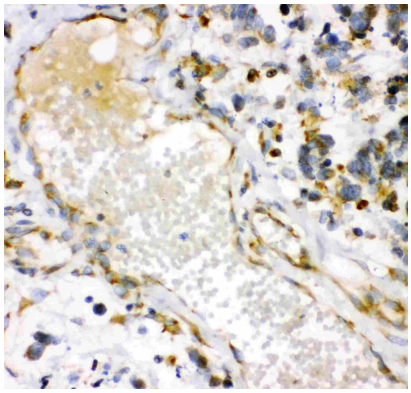


Anti- HMOX1 antibody, ABO11903, Western blottingAll lanes: Anti HMOX1 (ABO11903) at 0.5ug/mlWB: Recombinant Human HMOX1 Protein 0.5ngPredicted bind size: 37KDObserved bind size: 37KD

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.