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Heme Oxygenase 1 Rabbit pAb

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Catalog # AP52105

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P09601
Reactivity	Rat, Human
Predicted	Pig, Dog, Mouse, Rabbit, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32819
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HO-1
Epitope Specificity	101-200/288
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Microsome. Endoplasmic reticulum.
DISEASE	Defects in HMOX1 are the cause of heme oxygenase 1 deficiency (HMOX1D) [MIM:614034]. A disease characterized by impaired stress hematopoiesis, resulting in marked erythrocyte fragmentation and intravascular hemolysis, coagulation abnormalities, endothelial damage, and iron deposition in renal and hepatic tissues. Clinical features include persistent hemolytic anemia, asplenia, nephritis, generalized erythematous rash, growth retardation and hepatomegaly.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The hemeoxygenase-1 calls that the hemoglobin oxidizes to synthesize the enzyme again-1(hemeoxygenase-1, HO-1) is the catalyst enzyme that a kind of hemoglobin declines the solution, under the NADPH and the cell dye P-450 revivification enzymes and the member oxygen functions, the catalyst HO-1 hemoglobin declines the solution as the courage green vegetable, CO and irons, the former revivification has the very strong anti- to oxidize the ability after become the red vegetable of courage , the latter is a kind of important letter to make the member.

Additional Information

Gene ID	3162
Other Names	Heme oxygenase 1, HO-1, 1.14.14.18, Heme oxygenase 1 soluble form, HMOX1, HO, HO1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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)

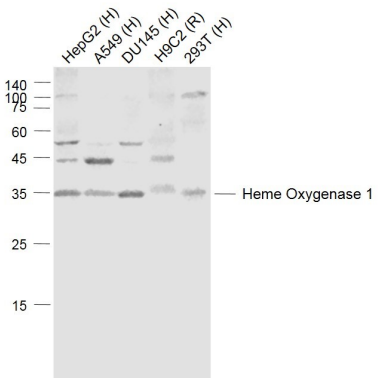
Background

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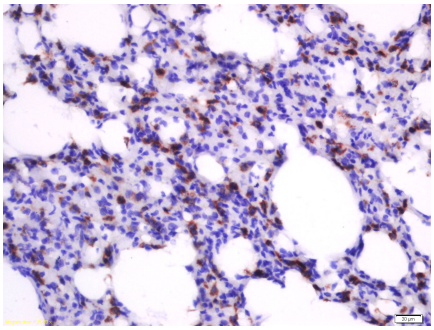
References

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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).
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Images



Sample:
Lane 1: HepG2 (Human) Cell Lysate at 30 ug
Lane 2: A549 (Human) Cell Lysate at 30 ug
Lane 3: DU145 (Human) Cell Lysate at 30 ug
Lane 4: H9C2 (Rat) Cell Lysate at 30 ug
Lane 5: 293T (Human) Cell Lysate at 30 ug
Primary: Anti-Heme Oxygenase 1 (AP52105) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 32 kD
Observed band size: 35 kD



Tissue/cell: rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Heme Oxygenase 1 Polyclonal Antibody, Unconjugated(AP52105) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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