Heme oxygenase 1 polyclonal antibody

The peptide is totally conserved in pig, rat and mouse HO-1; three amino acid substitutions (A16L; A20G; V24A) exist in the aligned region (residues 31-44) within human, rat and rabbit HO-2; and a single change (A16L) exists in chicken HO.

The rate limiting enzyme in heme catabolism, heme oxygenase, was first described in 1968 and was thought to be a species of cytochrome P450. However, subsequent work showed the enzyme to be a protein distinct from the P450 family and capable of catalysing the degradation of heme to biliverdin and iron, with the concomitant release of carbon monoxide. This enzyme activity is highly conserved throughout the Animal Kingdom and has been identified in algae and plants as well as in all higher species. Heme oxygenase-1 (HO-1) was first purified to homogeneity from rat liver and pig spleen and shown to have a molecular weight of 32kDa. Increased expression of HO-1 can be induced by a large number of structurally unrelated pharmacological and other agents, including cytokines and oxidants, as well as by heat shock and other forms of cellular stress. Baseline levels of HO-1 expression are high in certain tissues, including spleen and liver, but enriched enzyme preparations are recommended for experimental analysis. Recent data have demonstrated a cytoprotective role for HO-1, preventing cell death by modulating intracellular iron levels.

This antibody is covered by our Worry-Free Guarantee.

Citations: 18 View Online »

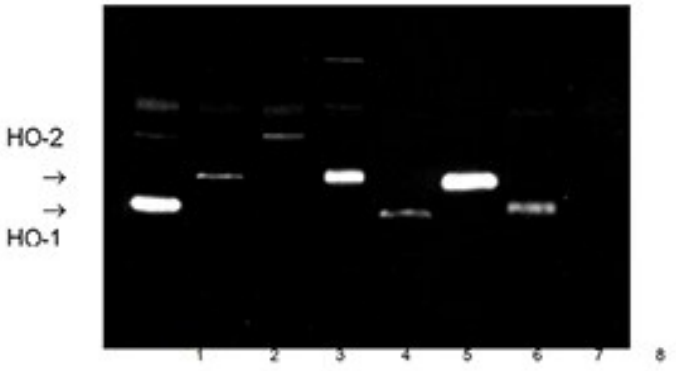
Ordering Information

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BML-HC3001-0100	100µl

Manuals, SDS & CofA

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Western blot analysis: HO-1 was detected using HO-1, pAb (Prod. no. BML-HC3001) (lanes 1, 3, 5 and 7), and HO-2 was detected using HO-2, pAb (Prod. no. BML-HC3002) (lanes 2, 4, 6 and 8). Both antibodies were used at a dilution of 1:1000. Luminograph (ECL, 15 sec. exposure, ref. FM020/054) showing HO-1 and HO-2 expression in lysates prepared from gIFN/LPS stimulated RAW264.7 mouse macrophage cells (lanes 1 and 2), HepG2 (lanes 3 and 4), rat testis (HP9312, lanes 5 and 6) and rat spleen (HP9313, lanes 7 and 8).

Handling & Storage

Handling	Store unopened vial at -20°C until required for use. Store diluted antibody at 2-4°C and use within 1 month. Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	HMOX1, Hsp32, Heat shock protein 32, HO-1
Application	IHC, WB
Formulation	Liquid. In PBS containing 0.09% sodium azide.
Host	Rabbit
Immunogen	Synthetic peptide corresponding to aa 12-25 of human heme oxygenase 1 (HO-1) protein.
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	Immunohistochemistry (1:50-1:1,000)Western Blot (1:1,000)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from rabbit serum.
Species Reactivity	Human
UniProt ID	P09601
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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