

PRODUCT INFORMATION



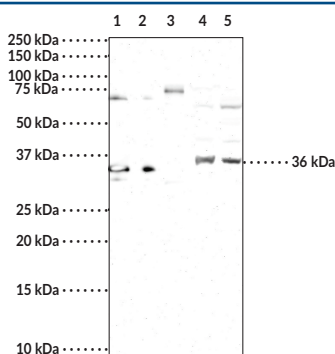
HO-2 Polyclonal Antibody

Item No. 24634

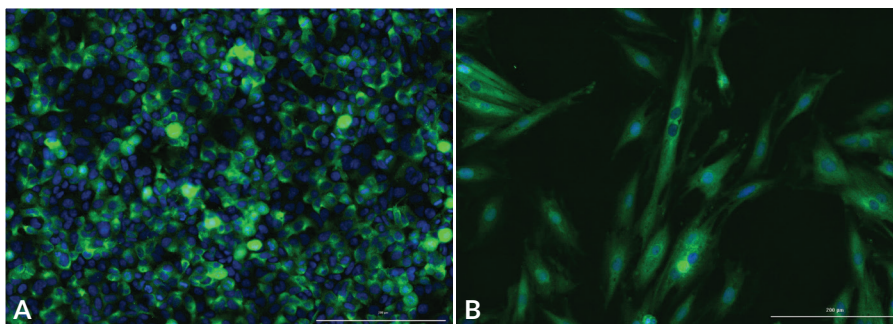
Overview and Properties

Contents:	This vial contains 500 µg of HO-2 Polyclonal Antibody.
Synonyms:	Heme Oxygenase 2 Protein, HMOX2, HO2
Immunogen:	Human recombinant HO-2 protein
Species Reactivity:	(+) Human HO-2
Uniprot No.:	P30519
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2 with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	ELISA, Immunofluorescence (IF), and Western blot (WB); the recommended starting dilutions for IF is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: HO-2 (human recombinant) (Item No. 22732) (0.005 µg)
Lane 2: HO-2 (human recombinant) (Item No. 22732) (0.001 µg)
Lane 3: HO-1 (human recombinant) (Item No. 22731) (0.1 µg) [negative control]
Lane 4: A549 Cell Lysate (50 µg)
Lane 5: HeLa Heat Shock Cell Lysate (30 µg)



Panel A: Immunofluorescent staining of Huh-7 (human liver) cells. HO-2 Polyclonal Antibody at dilution of 1:200 followed by Goat Anti-Rabbit IgG FITC (Item No. 10006588) (green) and Hoechst nuclear stain (blue). Panel B: Immunofluorescent staining of H9C2 (rat myoblast) cells. HO-2 Polyclonal Antibody at dilution of 1:100 followed by Goat Anti-Rabbit IgG FITC (Item No. 10006588) (green) and Hoechst nuclear stain (blue).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Heme oxygenase-2 (HO-2) is a constitutively active heme oxygenase encoded by the *HMOX2* gene.^{1,2} It is a membrane-bound enzyme that catalyzes the cleavage of heme to give carbon monoxide (CO), ferrous ions (Fe²⁺), and biliverdin, with biliverdin being further processed into bilirubin. HO-2 is found in neurons, testes, and endothelial and smooth muscle cells from cerebral vessels.² HO-2 protects against apoptotic neuronal cell death in models of ischemic injury and oxidative stress. It also acts as an oxygen sensor to inhibit systemic vascular reactivity and reduce cell death in response to hypoxia. Cayman's HO-2 Polyclonal Antibody can be used for Western blot and ELISA applications. The antibody recognizes HO-2 at 36 kDa from human samples.

References

1. Maines, M.D. The heme oxygenase system: A regulator of second messenger gases. *Annu. Rev. Pharmacol. Toxicol.* **37**, 517-554 (1997).
2. Muñoz-Sánchez, J. and Cháñez-Cárdenas, M.E. A review on hemeoxygenase-2: Focus on cellular protection and oxygen response. *Oxid. Med. Cell. Longev.* **2014:604981** (2014).

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