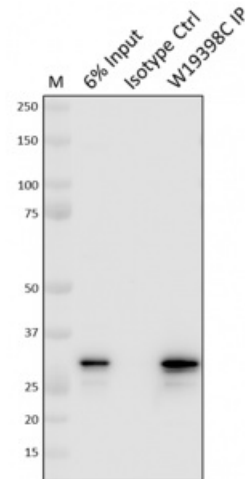


**Purified anti-HMOX1**

**Catalog # /** 5270505 / 25 µg  
**Size:** 5270510 / 100 µg  
**Clone:** W19398C  
**Isotype:** Rat IgG2b, κ  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide  
**Concentration:** 0.5 mg/mL

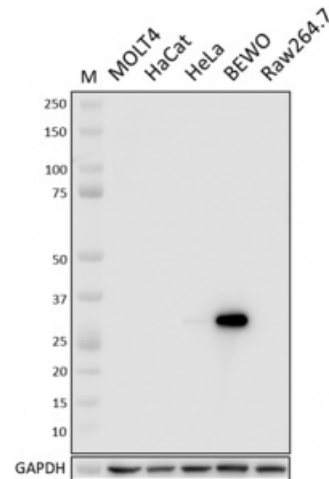


Whole cell extracts (250 µg total protein) prepared from A549 cells were immunoprecipitated overnight with 2.5 µg of purified rat IgG2b, κ isotype ctrl antibody (Cat. No. 400602) or purified anti-HMOX1 antibody (clone W19398C). The resulting IP fractions and whole cell extract input (6%) were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a PVDF membrane, and probed with an HMOX1 antibody other than W19398C. Lane M: Molecular weight marker.

**Applications:**

**Applications:** Intracellular Staining for Flow Cytometry, Immunocytochemistry, Immunoprecipitation, Western Blotting

**Recommended Usage:** Each lot of this antibody is quality control tested by western blotting. For western blotting, the suggested use of this reagent is 0.5 - 1.0 µg/mL. For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 - 0.5 µg per million cells in 100 µL volume. For immunocytochemistry, a concentration range of 2.0 - 5.0 µg/mL is recommended. For immunoprecipitation, the suggested use of this reagent is 2.5 µg/test. It is recommended that the reagent be titrated for optimal performance for each application.



Whole cell extracts (15 µg protein) from the indicated cell lines were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a PVDF membrane, and probed with 1.0 µg/mL (1:500 dilution) of purified anti-HMOX1 antibody (clone W19398C) overnight at 4°C. Proteins were visualized by chemiluminescence detection using HRP goat anti-rat IgG antibody (Cat. No. 405405) at

**Application Notes:** Clone was tested for ICC using three fix/perm methods (PFA/Triton-X, PFA/MeOH, MeOH only), the best method was the use of PFA/Triton X-100.

In the CoCl<sub>2</sub> treated cells for ICC, staining was seen in less than 5% of cells.

Clone was tested for ICFC using cytokine fix/perm method only (based on ICC results).

2.0 µg/mL dilution. Direct-Blot™ HRP anti-GAPDH antibody (Cat. No. 607904) was used as a loading control at a 1:50000 dilution (lower). Lane M: Molecular weight marker.

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**Description:** HMOX1 is a member of the heme oxygenase family. Unlike its constitutive counterpart, it is an inducible enzyme triggered by external stimuli such as nitric oxide, growth factors, heavy metals, UV radiation, phorbol esters, inflammatory cytokines, heme, etc. Transcription of HMOX1 in tissue has been shown to be a product of the nrf2/ARE pathway where an increase in its protein levels results in heme degradation. The tissue protective effects of HMOX1 are a result of the bioactive products produced after heme degradation: iron ions, carbon monoxide, and biliverdin which is converted to bilirubin via biliverdin reductase.

**Antigen References:**

1. Yang B, *et al.* 2018. *Toxicol Appl Pharmacol.* 355:189-197
2. Chora A, *et al.* 2007. *J Clin Invest.* 117(2):438-47
3. Harding H, *et al.* 2003. *Mol Cell.* 11(3):619-33.