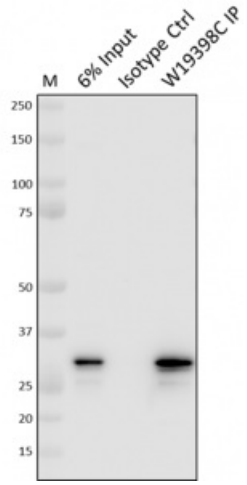
SONY

Product Data Sheet

Purified anti-HMOX1

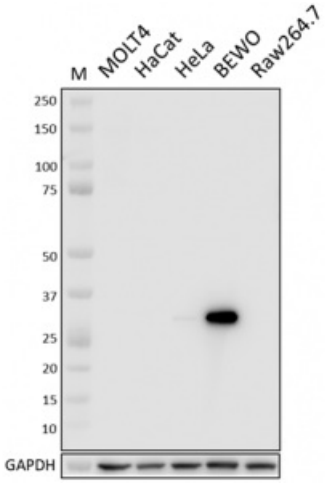
Catalog # / Size:	5270510 / 100 µg 5270505 / 25 µg
Clone:	W19398C
Isotype:	Rat IgG2b, κ
Immunogen:	Modified peptide
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Workshop Number:	750 under optimal conditions.
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, k 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 CoCl2 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.

Application References:

1. Jha JC, *et al.* 2013. *J. Virol.* 87:5255. (FC) PubMed
2. Akbay A, *et al.* 2008. *Am J Pathol.* 173:536. (IHC) PubMed
3. Mochizuki K, *et al.*2008.*J cell Sci.*121:2148. (IF) PubMed
4. Xiao R, *et al.* 2007. *Mol Cell Biol.*27:5393. (IF) PubMed
5. Rossi DJ, *et al.* 2007. *Nature*. 447:725. (IF) PubMed
6. Loidl J, *et al.* 2009. *Mol Cell Biol.* 20:2048. (IF) PubMed
7. Beels L, *et al.* 2009. *Circulation.* 120:1903. (IF) PubMed
8. Suzuki K, *et al.* 2010. *Nucleic Acids Res.* 38:e129. (IF) PubMed
9. Lukaszewicz A. 2010. *Chromasoma* Apr 27. [Epub ahead of print] (IF) PubMed
10. Yamada C, *et al.* 2010 *J. Biol. Chem.* 285:16693. (WB) PubMed
11. Bu Y, *et al.* 2010, *Biochem Biophys Res Commun.* 397:157. (WB) PubMed
12. Massignan T, *et al.* 2010. *J. Biol Chem.* 285:7752. (WB) PubMed
13. Banath JP, *et al.* 2010. *BMC Cancer* 10:4 (FC)
14. Zhang M., *et al.* 2011. *Cancer Res.* 23:7155. PubMed
15. Kuefner MA, *et al.* 2012. *Radiology* 264:59. PubMed
16. Yoshihara Y, *et al.* 2012. *Biochem Biophys Res Cmmun.* 421:57. PubMed
17. Titus S, *et al.* 2013. *Sci Transl Med.* 13:21. PubMed
18. Crown KN, *et al.* 2013. *G3.* 6:1927. PubMed
19. Schenkwein D, *et al.* 2013. *Nucleic Acids Res.* 41:e61. PubMed
20. Zhadanova NS, *et al.* 2014. *Mol Cell Biol.* 34:2786. PubMed
21. Horrell SA, *et al.* 2014. *Eukaryot Cell.* 13:1300. PubMed
22. Maya-Mendoza A, *et al.* 2015. *Mol Oncol.* 9:601. PubMed

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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.