Product Datasheet

HO-1/HMOX1/HSP32 Antibody (HO-1-1) - BSA Free
NBP1-97507-0.05mg

Unit Size: 0.05 mg

Store at -20C. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 20

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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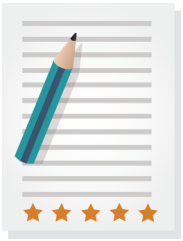
Updated 9/9/2025 v.20.1



NBP1-97507-0.05mg

HO-1/HMOX1/HSP32 Antibody (HO-1-1) - BSA Free

Product Information

Unit Size	0.05 mg
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	HO-1-1
Preservative	0.09% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS and 50% Glycerol
Target Molecular Weight	33 kDa

Product Description

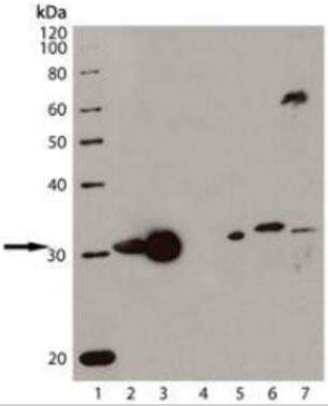
Description	Novus Biologicals Mouse HO-1/HMOX1/HSP32 Antibody (HO-1-1) - BSA Free (NBP1-97507) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and Simple Western. Anti-HO-1/HMOX1/HSP32 Antibody: Cited in 20 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	3162
Gene Symbol	HMOX1
Species	Human, Mouse, Rat, Bovine, Canine
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Marker	Oxidative Stress Marker
Immunogen	Synthetic peptide corresponding to the sequence near the N-terminus of human HO-1.

Product Application Details

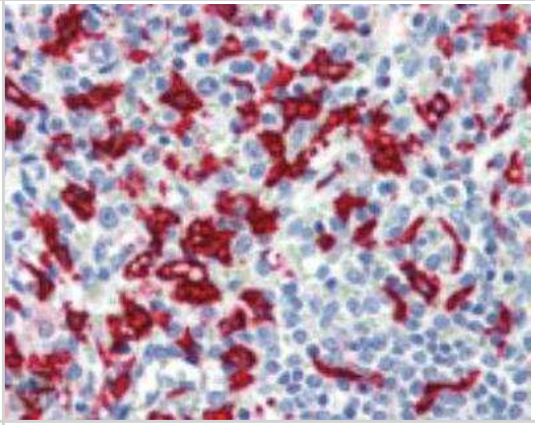
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:1000, Simple Western, Flow Cytometry 10 ug/ml, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500
Application Notes	Use in Simple Western reported in scientific literature (PMID: 29890265). See Simple Western Antibody Database for Simple Western validation: separated by Size

Images

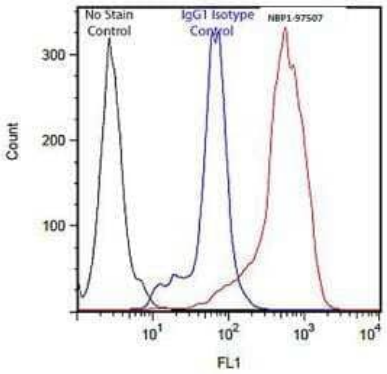
Western Blot: HO-1/HMOX1/HSP32 Antibody (HO-1-1) [NBP1-97507] - Lane 1: MW marker; Lane 2: HO-1 (rat), (recombinant); Lane 3: HO-1 (human), (recombinant); Lane 4: HO-2 (human), (recombinant); Lane 5: MDBK cell lysate; Lane 6: Dog liver microsome; Lane 7: Mouse liver microsome.



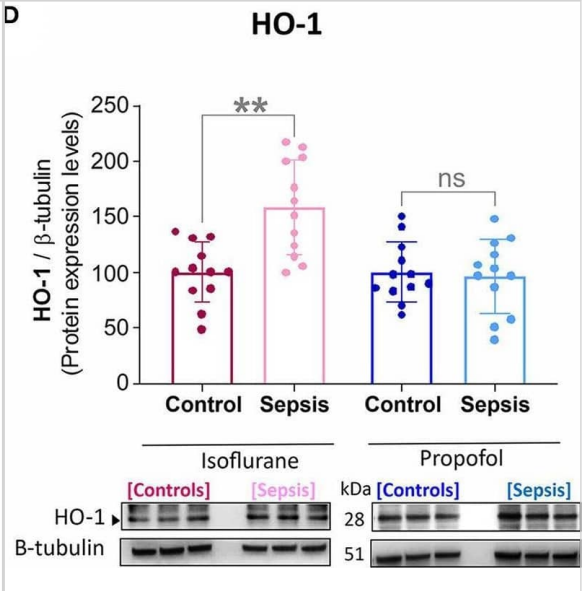
Immunohistochemistry-Paraffin: HO-1/HMOX1/HSP32 Antibody (HO-1-1) [NBP1-97507] - Analysis of human spleen tissue stained with HO-1, mAb (HO-1-1) at 10ug/ml.

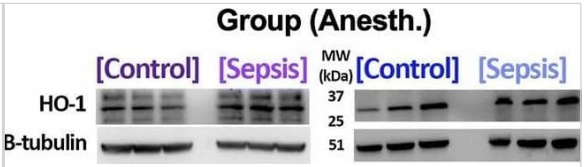
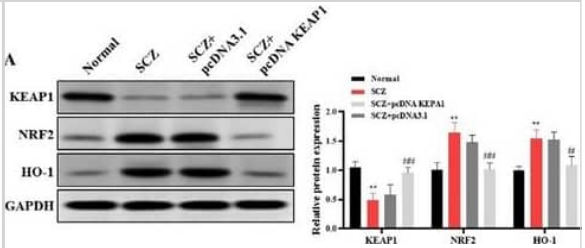
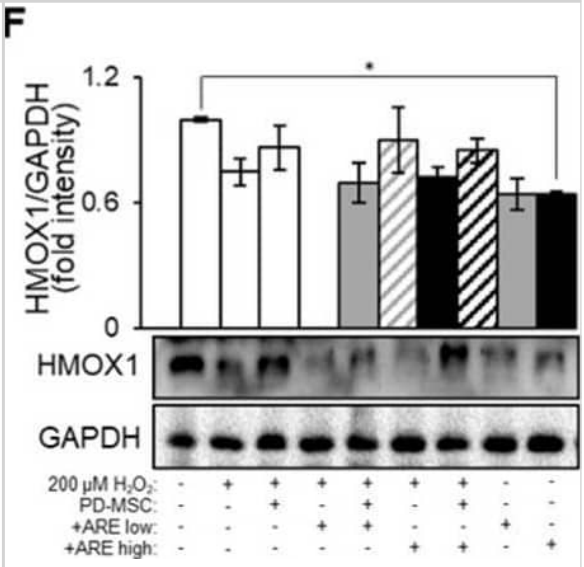


Flow Cytometry: HO-1/HMOX1/HSP32 Antibody (HO-1-1) [NBP1-97507] - Analysis of 10^6 Jurkat cells stained using HO-1 monoclonal antibody (HO-1-1), (Prod. No. ADI-OSA-110), at a concentration of 50 ug/mL



Effect of Sepsis with Isoflurane or Propofol anesthesia on Liver HIF1a, Bcl2, iNOS and HO-1, Protein expression levels. (A) HIF-1α protein was increased in both anesthetic groups by sepsis (Isoflurane +Sepsis, **p = 0.004 and Propofol + Sepsis, *p = 0.04). (B) Bcl-2 protein was increased in Isoflurane +Sepsis group (**p = 0.004) and no significant change in Propofol + Sepsis (*p = 0.104). (C) Inducible nitric oxide synthase [iNOS, (**p = 0.002)] and (D) Heme oxygenase-1 (HO-1, ***p = 0.0006) was increased in Isoflurane +Sepsis group. Whereas, in animals anesthetized with Propofol, three organ-protective proteins, Bcl-2, iNOS, and HO-1 expression was unchanged significantly. Data are shown in mean +/- S.D, n = 12. *denotes a statistically significant (P □ 0.05) difference between animals exposed to sepsis and controls. Statistical differences between results were evaluated using the t-test. “ns" (in graphs) represents not statistically significant. “ns" (in immunoblots) represents non-specific signal. “□" represents specific signal. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/33392215), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Protein expression data (upper) and representative raw data (lower) for animals anesthetized with isoflurane (bcl-2 [a median + IQR], HIF-1α [b mean + 95% confidence interval (CI)], HO-1 [c mean + 95% CI for isoflurane, median + IQR for propofol], iNOS [d mean + 95% CI for isoflurane, median + IQR for propofol) *denotes a statistically significant difference between animals exposed to sepsis and controls Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31307382), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
KEAP1 modulates ferroptosis through NRF2/HO□1 pathway in hiPSC□derived cINs. (A) Western blot showed the expression of NRF2 and HO□1. (B) Quantification of Fe2□ levels, using an iron content determination assay. (C) Measurement of MDA levels using an MDA assay kit. (D) Quantification of GSH levels using a GSH assay kit. (E) Assessment of GPX4 activity using an ELISA kit. (F) GPX4 mRNA and protein were evaluated by qRT□PCR and Western blot analysis, respectively. (G) Measurement of lipid oxidation using C11□BODIPY staining, a dye specific for detecting lipid reactive oxygen species. (H) Quantification of inflammatory cytokines in the cell culture supernatant using ELISA kits. *p < 0.05 and **p < 0.01 show statistical significance when compared to SCZ□pcDNA KEAP1 group. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/40021790), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
ARE-primed PD-MSCs increased antioxidant and anti-inflammatory effects in ARPE19 cells. (A) Oxidative stress levels evaluated in ARPE19 cells using MitoSOX/MitoTracker staining and (B) intensity quantified by image J. The gray bar, gray hatch bar, black bar, black hatch bar means ARPE19 cells with H2O2 and ARE low, ARPE19 cells with with H2O2, ARE low and PD-MSCs, ARPE19 cells with H2O2 and ARE high and ARPE19 cells with with H2O2, ARE high and PD-MSCs. The mRNA levels of (C) SOD1 and (D) HMOX1 analyzed by qRT-PCR. The protein levels of (E) SOD1 and (F) HMOX1 analyzed by Western blot. The mRNA levels of (G) TGFB1, (H) IL6 analyzed by qRT-PCR. The protein levels of (I) TGFB1 and (J) IL6 analyzed by Western blot. Scale bar = 200 μm. Each experiment was replicated three times, resulting in a total sample size of three (n = 3). The data represent the mean +/- SEM. Statistical significance was determined by using one-way ANOVA and Tukey's post hoc test for the comparison of groups, * p < 0.05. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/39056810), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Peng R, Liu X, Wang C et al. Iron overload enhances TBI-induced cardiac dysfunction by promoting ferroptosis and cardiac inflammation Biochemical and biophysical research communications 2023-11-19 [PMID: 37801989] (IHC, Mouse)

Hung YW, Ouyang C, Ping X et al. Extracellular arginine availability modulates eIF2? O-GlcNAcylation and heme oxygenase 1 translation for cellular homeostasis Journal of biomedical science 2023-05-22 [PMID: 37217939] (IHC-P, WB, ICC/IF, Human)

Yoo MH, Lee SJ, Kim W et al. Bisphenol A impairs renal function by reducing Na+/K+-ATPase and F-actin expression, kidney tubule formation in vitro and in vivo Ecotoxicology and environmental safety 2022-10-04 [PMID: 36206637] (IF/IHC, ICC/IF, Rat, Human)

Rai D, Tripathi AK, Sardar A et al. A novel BMP2 secretagogue ameliorates glucocorticoid induced oxidative stress in osteoblasts by activating NRF2 dependent survival while promoting Wnt/ beta-catenin mediated osteogenesis Free radical biology & medicine 2022-08-10 [PMID: 35963563] (WB, Mouse)

Arigela CS, Nelli G, Gan SH Et al. Bitter Gourd Honey Ameliorates Hepatic and Renal Diabetic Complications on Type 2 Diabetes Rat Models by Antioxidant, Anti-Inflammatory, and Anti-Apoptotic Mechanisms Foods (Basel, Switzerland) 2021-11-20 [PMID: 34829154] (ICC/IF, Rat)

Vendidandala NR, Yin TP, Nelli G Et al. Gallocatechin silver nanoparticle impregnated cotton gauze patches enhance wound healing in diabetic rats by suppressing oxidative stress and inflammation via modulating the Nrf2/HO-1 and TLR4/NF-kappa B pathways Life sciences 2021-10-06 [PMID: 34624322] (IHC-P, Rat)

Nesbitt NM, Malone LE, Liu Z et al. Divergent erythroid megakaryocyte fates in Blvrb-deficient mice establish non-overlapping cytoprotective functions during stress hematopoiesis Free radical biology & medicine 2020-12-24 [PMID: 33359909] (WB, Mouse)

Seok J, Park H, Choi JH et al. Placenta-Derived Mesenchymal Stem Cells Restore the Ovary Function in an Ovariectomized Rat Model via an Antioxidant Effect Antioxidants (Basel) 2020-07-06 [PMID: 32640638] (WB, Rat)

Seimetz M, Sommer N, Bednorz M et al. NADPH oxidase subunit NOXO1 is a target for emphysema treatment in COPD Nat Metab 2020-06-01 [PMID: 32694733]

Kaya O, Orhan E, Sapmaz-Metin M, et al. The effects of epidermal growth factor on early burn-wound progression in rats Dermatol Ther 2019-12-18 [PMID: 31849151] (IF/IHC, Rat)

Deng G, Ma C, Zhao H et al. Anti-edema and antioxidant combination therapy for ischemic stroke via glyburide-loaded betulinic acid nanoparticles Theranostics 2019-09-21 [PMID: 31660082] (WB, Human)

Mossoba ME, Vohra S, Toomer H et al. Diglycolic acid induces HepG2/C3A liver cell toxicity in vitro Toxicol In Vitro. [PMID: 29890265] (Simple Western, Human)

More publications at http://www.novusbio.com/NBP1-97507

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