

Human/Mouse HO-1/HMOX1/HSP32 Antibody

Monoclonal Rat IgG_{2B} Clone # 412811

Catalog Number: MAB3776

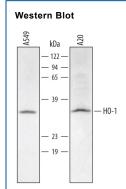
DESCRIPTION		
Species Reactivity	Human/Mouse	
Specificity	Detects endogenous human and mouse HO-1 in Western blots. In Western blots, this antibody does not cross-react with rhHO-2.	
Source	Monoclonal Rat IgG _{2B} Clone # 412811	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	E. coli-derived recombinant human HO-1/HMOX1 Met1-Thr261 Accession # P09601	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

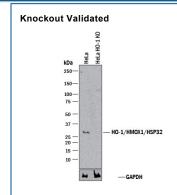
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample	
Western Blot	1 μg/mL	See Below	
Knockout Validated		HO-1/HMOX1/HSP32 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in HO-1/HMOX1/HSP32 knockout HeLa cell line.	

DATA



Detection of Human/Mouse HO-1/HMOX1/HSP32 by Western Blot. Western blot shows lysates of A549 human lung carcinoma cell line and A20 mouse B cell lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse HO-1/HMOX1/HSP32 Monoclonal Antibody (Catalog # MAB3776) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for HO-1/HMOX1/HSP32 at approximately 32 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.



Western Blot Shows Human HO-1/HMOX1/HSP32 Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and HO-1/HMOX1/HSP32 knockout HeLa cell line (KO). PVDF membrane was probed with 1 μg/mL of Rat Anti-Human/Mouse HO-1/HMOX1/HSP32 Monoclonal Antibody (Catalog # MAB3776) followed by HRPconjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for HO-1/HMOX1/HSP32 at approximately 32 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Heme Oxygenase 1 (HO-1), also known as HMOX1 and Heat Shock Protein 32 (HSP32), is a 32 kDa microsomal enzyme required for the metabolism of heme to biliverdin. Heme Oxygenase occurs as 2 isozymes, an inducible Heme Oxygenase-1 (HO-1/HMOX1) and a constitutive Heme Oxygenase-2 (HO-2/HMOX2). HO-1 expression is induced by heme and other non-heme compounds. Human HO-1 shares 82% amino acid sequence identity with mouse HO-1.

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