Revision 1

Store at -20C

#12226

HMOX2/HO-2 Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	36	Rabbit	#P30519	3163

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

HMOX2/HO-2 Antibody recognizes endogenous levels of total HMOX2/HO-2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Met262 of human HMOX2/HO-2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Heme oxygenases (HMOX or HO) catalyze the rate-limiting step of the oxidative degradation of heme into iron, carbon monoxide, and biliverdin (1). Biliverdin is then converted to bilirubin (2). Heme is a strong pro-oxidant whereas bilirubin is a strong antioxidant (2). Research studies suggest disregulation of heme oxygenases may contribute to oxidative stress-related diseases (2). There are three isozymes of heme oxygenases: HMOX1/HO-1, HMOX2/HO-2, and HMOX3/HO-3 (1,2). HMOX1/HO-1 is inducible by heme and other stress stimuli (1,3). HMOX2/HO-2 and HMOX3/HO-3 are constitutively expressed (1,3).

Background References

1. Piotrkowski, B. et al. (2009) *J Endocrinol* 203, 155-65.
2. Synowiec, E. et al. (2012) *Mol Biol Rep* 39, 2081-7.
3. Otterbein, L.E. and Choi, A.M. (2000) *Am J Physiol Lung Cell Mol Physiol* 279, L1029-37.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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