



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C  
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## HO-1 (P249) Antibody

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

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 28	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P09601	<b>Entrez-Gene Id:</b> 3162
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity/Sensitivity</b>	HO-1 (P249) Antibody detects endogenous levels of total HO-1 protein.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acid residues surrounding Pro249 of human HO-1 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	Heme oxygenase (HO) is the rate-limiting enzyme in the catabolism of heme that results in the release of carbon monoxide, iron, and biliverdin (1). The products of this enzymatic reaction play important biological roles in antioxidant, anti-inflammatory, and cytoprotective functions (2). HO comprises two isozymes, including the constitutively expressed HO-2 isozyme and the inducible HO-1 isozyme (3). Inducible HO-1 is expressed as an adaptive response to several stimuli, including heme, metals, and hormones (4). The induction of HO-1 has been implicated in numerous disease states, such as transplant rejection, hypertension, atherosclerosis, Alzheimer's disease, endotoxic shock, diabetes, inflammation, and neurological disorders (1,5).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Abraham, N.G. and Kappas, A. (2008) <i>Pharmacol Rev</i> 60, 79-127.</li> <li>2. Otterbein, L.E. et al. (2003) <i>Trends Immunol</i> 24, 449-55.</li> <li>3. Cruse, I. and Maines, M.D. (1988) <i>J Biol Chem</i> 263, 3348-53.</li> <li>4. Maines, M.D. (1988) <i>FASEB J</i> 2, 2557-68.</li> <li>5. Schipper, H.M. et al. (2009) <i>Curr Alzheimer Res</i> 6, 424-30.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> 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.
<b>Applications Key</b>	<b>W:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> Human
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