

## HO-1 Protein, Mouse (His)

<b>Cat. No.:</b>	HY-P700495
<b>Synonyms:</b>	rHuHeme oxygenase 1/HO-1; Heme Oxygenase 1; HO-1; HMOX1; HO; HO1
<b>Species:</b>	Mouse
<b>Source:</b>	P. pastoris
<b>Accession:</b>	P14901 (M1-M289)
<b>Gene ID:</b>	15368
<b>Molecular Weight:</b>	Approximately 35 KDa

### PROPERTIES

<b>AA Sequence</b>	<pre> MERPQPDSMP   QDLSEALKEA   TKEVHIQAEN   AEFMKNFQKG QVSREGFKLV   MASLYHIYTA   LEEEIERNKQ   NPVYAPLYFP EELHRRAALE   QDMAFWYGPH   WQEIIIPCTPA   TQHYVKRLHE VGRTHPELLV   AHAYTRYLGD   LSGGQVLKKI   AQKAMALPSS GEGLAFFTFP   NIDSPTKFKQ   LYRARMNTLE   MTP EVKHRVT EEAKTAFLLN   IELFEELQVM   LTEEHKDQSP   SQMASLRQRP ASLVQDTAPA   ETPRGKPKIS   TSSSQTPLLQ   WVLTLSFLLA TVAVGIYAM           </pre>
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized a 0.22 µm filtered solution of Tris-based buffer,50% glycerol.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	<p>HO-1 protein, through its catalytic activity, orchestrates the oxidative cleavage of heme at the alpha-methene bridge carbon, leading to the release of carbon monoxide (CO) and the generation of biliverdin IX<sub>α</sub>. Simultaneously, it liberates the central heme iron chelate as ferrous iron. This enzymatic process not only provides a mechanism for the breakdown of heme but also exerts a cytoprotective effect by preventing the sensitization of cells to programmed cell death or apoptosis. The ability of HO-1 to catabolize free heme underscores its crucial role in cellular defense mechanisms, contributing to cell</p>
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survival and protection against various stressors.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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