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## Recombinant Human HO-1/HMOX1 Protein

Catalog Number: PKSH032529

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### Description

Species Human

Source E.coli-derived Human HO-1;HMOX1 protein Met 1-Thr 261

Calculated MW 29.9 kDa
Observed MW 30 kDa
Accession P09601

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Concentration** Subject to label value.

**Endotoxin**  $\leq 1.0 \text{ EU} \text{ per } \mu \text{g of the protein as determined by the LAL method.}$ 

**Storage** Storage Storage  $4 < -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.

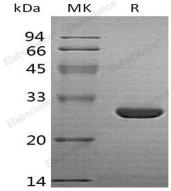
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 1mM EDTA, pH

7.4.

#### Data



> 95 % as determined by reducing SDS-PAGE.

# Background

Heme Oxygenase 1 (HO-1) is an enzyme in endoplasmic reticulum that belongs to the heme oxygenase family. HO-1 cleaves the heme ring at the alpha methene bridge to form Biliverdin. Biliverdin is subsequently converted to Bilirubin by Biliverdin reductase. In physiological state, the highest activity of HO-1 is found in the spleen, where senescent erythrocytes are sequestrated and destroyed. HO-1 activity is highly inducible by its substrate heme and by various no n-heme substances such as heavy metals, bromobenzene, endotoxin, oxidizing agents and UVA. HO-1 is involved in the regulation of cardiovascular function and response to a variety of stressors. Defects in HO-1 are the cause of Heme Oxygenase 1 deficiency, resulting in marked erythrocyte fragmentation and intravascular hemolysis, coagulation abnormalities, endothelial damage, and iron deposition in renal and hepatic tissues.

For Research Use Only

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