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## 32-7127: Recombinant Human Heme Oxygenase 1/HO-1

Gene ID: HMOX1
Gene ID: 3162
Uniprot ID: P09601

## **Description**

Source: E.coli. MW :29.86kD.

Recombinant Human Heme Oxygenase 1 is produced by our E.coli expression system and the target gene encoding Met1-Thr261 is expressed. 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 non-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.

## **Product Info**

Amount:  $10 \mu g / 50 \mu g$ 

**Content :** Supplied as a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 1mM EDTA, pH 7.4. **Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Amino Acid: MERPQPDSMPQDLSEALKEATKEVHTQAENAEFMRNFQKGQVTRDGFKLVMASLYHIYVALEEEIERNKESPV

FAPVYFPEELHRKAALEQDLAFWYGPRWQEVIPYTPAMQRYVKRLHEVGRTEPELLVAHAYTRYLGDLSGGQV LKKIAQKALDLPSSGEGLAFFTFPNIASATKFKQLYRSRMNSLEMTPAVRQRVIEEAKTAFLLNIQLFEELQELLTH

DTKDQSPSRAPGLRQRASNKVQDSAPVETPRGKPPLNT

## **Application Note**

**Endotoxin**: Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$  (1 IEU/ $\tilde{A} \square \hat{A} \mu g$ ) as determined by LAL test.