

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

**Gene :** 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 sequestered 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 µg / 50 µg

**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  
FAPVYFPEELHRKAALQDLAFWYGPRWQEVIPYTPAMQRYVKRLHEVGRTEPELLVAHAYTRYLGDLSGGQV  
LKKIAQKALDLPSSGEGLAFFTFPNIASATKFKQLYRSRMNSLEMPAVRQRVIEEAKTAFLLNIQLFEELQELLTH  
DTKDQSPSRAPGLRQRASNKVQDSAPVETPRGKPLNT

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.