

Product Information

HO1, GST-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5185**
Storage Temperature -70°C

Synonyms: HMOX1, HSP32, bK286B10

Description

HO1 (Heme oxygenase 1) catalyzes the oxidative cleavage of heme to biliverdin and is one of the main genes controlling heme synthesis and catabolism. HO1 plays a protective role in various disorders and can ameliorate experimental MN via multiple pathways, including antioxidative and immunomodulatory effects.¹ Exposure of primary hepatocytes to carbon monoxide and nitric oxide results in dramatic induction of HO1 in dose and time-dependent manner, and this induction is blocked by MAP kinase inhibitors (MAPKs) but not by inhibitors of PI3 kinase pathway.²

Recombinant full-length human HO1 was expressed in *E. coli* cells using an N-terminal GST tag. The gene accession number is NM_002133. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~56 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

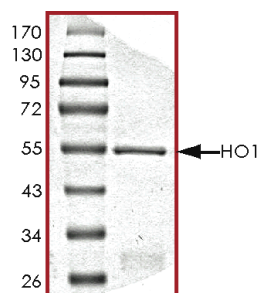
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Chia-Chao, W.U. et al., HO-1 induction ameliorates experimental murine membranous nephropathy: anti-oxidative, anti-apoptotic and immunomodulatory effects. *Nephrology Dialysis Transplantation*, **23**(10), 3082-3090 (2008).
2. Lee, B.S. et al., Carbon monoxide mediates heme oxygenase 1 induction via Nrf2 activation in hepatoma cells. *Biochem. Biophys. Res. Commun.*, **343**(3), 965-72 (2006).

DKF,MAM 10/11-1