



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# PRODUCT INFORMATION



## HO-1 (human, recombinant)

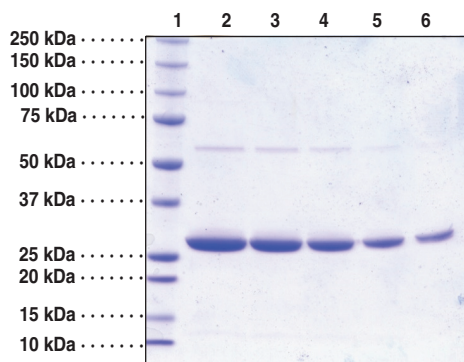
Item No. 22731

### Overview and Properties

**Synonyms:** Heat Shock Protein 32, Heme Oxygenase-1, HMOX1, Hsp32  
**Source:** Recombinant C-terminal His-tagged expressed in *E. coli*  
**Amino acids:** 1-265 (full length)  
**Uniprot No.:** P09601  
**Molecular Weight:** 31 kDa  
**Storage:** -80°C (as supplied)  
**Stability:** ≥1 year  
**Purity:** *batch specific* (≥90% estimated by SDS-PAGE)  
**Supplied in:** 50 mM HEPES, pH 8.0, with 150 mM sodium chloride  
**Protein Concentration:** *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Image



Lane 1: MW Markers  
Lane 2: HO-1 (8 µg)  
Lane 3: HO-1 (6 µg)  
Lane 4: HO-1 (4 µg)  
Lane 5: HO-1 (2 µg)  
Lane 6: HO-1 (1 µg)

*Representative gel image shown; actual purity may vary between each batch.*

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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# PRODUCT INFORMATION



## Description

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Heme oxygenase-1 (HO-1), also known as heat shock protein 32 (Hsp32), is an inducible heme oxygenase encoded by the HMOX1 gene.<sup>1-3</sup> It is a membrane-bound enzyme that catalyzes the cleavage of heme to release carbon monoxide (CO), ferrous ions (Fe<sup>2+</sup>), and biliverdin, with biliverdin being further processed into bilirubin. HO-1 is found in human spleen, liver, and kidney where its expression is induced by the presence of heme, hormones, metals, oxidative agents, and therapeutic compounds to protect against oxidative stress and inflammatory responses. HO-1 is upregulated in a variety of cancers and siRNA knockdown of HMOX1 or inhibition of HO-1 decreases cancer cell proliferation.<sup>4-6</sup> HO-1 also interacts with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) accessory protein Orf3a that, in a similar virus, SARS-CoV, is associated with activation of the NLRP3 inflammasome.<sup>7-9</sup> Cayman's HO-1 protein can be used for ELISA and Western blot (WB) applications.

## References

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