

Recombinant Mouse HMOX1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51278

Size: 10ug, 100ug

Protein Name: Heme oxygenase 1 (HO-1) (EC 1.14.14.18) (P32 protein) [Cleaved into: Heme oxygenase 1 soluble form]

Synonym: Hmox1

UniProt ID: P14901

UniProt Link: www.uniprot.org/uniprotkb/P14901/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 289 AA

Molecular Weight: 33 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MERPQPDSMPQDLSEALKEATKEVHIQAENAEFMKNFQKGQVSREGFKLVMASLYHIYTALEEEIER
NKQNPVYAPLYFPEELHRRAALEQDMAFWYGPHWQEIIPTPATQHYVKRLHEVGRTHPELLVAHA
YTRYLGDLSGGQVLKKAQKAMALPSSGEGLAFFTFPNIDSPTKFKQLYRARMNTLEMTPEVKHRVT
EEAKTAFLLNIELFEELQVMLTEEHKDQSPSQMASLRQRPASLVQDTAPAETPRGKPQISTSSSQTP
LLQWVLTLSFLLATVAVGIYAM

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Heme oxygenase 1 (HO-1) (EC 1.14.14.18) (P32 protein) [Cleaved into: Heme oxygenase 1 soluble form] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: [Heme oxygenase 1]: Catalyzes the oxidative cleavage of heme at the alpha-methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while releasing the central heme iron chelate as ferrous iron (By similarity) Affords protection against programmed cell death and this cytoprotective effect relies on its ability to catabolize free heme and prevent it from sensitizing cells to undergo apoptosis (By similarity).; [Heme oxygenase 1 soluble form]: Catalyzes the oxidative cleavage of heme at the alpha-methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while releasing the central heme iron chelate as ferrous iron.

Subcellular Localization: Endoplasmic reticulum membrane ; Single-pass type IV membrane protein ; Cytoplasmic side .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.