For Research Use Only

Recombinant Human Haptoglobin/HP protein (His Tag)



Catalog Number: Eg0445

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human Haptoglobin protein Val19-Asn406 (Accession# P00738-1) with a His tag at the Cterminus.

GeneID:

3240

Accession: P00738-1

Predicted Molecular Mass:

47.1 kDa

SDS-PAGE:

17 kDa, 36-46 kDa and 55-65 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Haptoglobin (Hp) is an abundant human plasma protein that tightly captures hemoglobin (Hb) during hemolysis. The Hb-Hp complex formation reduces the oxidative properties of heme/Hb and promotes recognition by the macrophage scavenger receptor CD163. The major functions of Hp are to scavenge Hb, prevent iron loss, and prevent heme-based oxidation. Decreased haptoglobin is a marker for hemolysis because haptoglobin levels become depleted in the presence of large amounts of free hemoglobin.

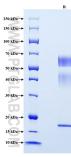
References

1.Andersen, Christian Brix Folsted et al. (2017) Antioxid Redox Signal.26(14):814-831. 2.Shih, Andrew W Y et al. (2014) Am J Hematol.89(4):443-447. 3.Delanghe, Joris R et al. (2024) Crit Rev Clin Lab Sci.61(4):275-297.

Synonyms

haptoglobin, HP, BP, HAPT, HP2 ALPHA 2

Selected Validation Data



Purity of Recombinant Human Haptoglobin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.