

Recombinant human Haptoglobin/HP protein

Catalog Number: ATGP3824

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

19-347aa

UniProt No.

P00738

NCBI Accession No.

NP_001119574

Alternative Names

Haptoglobin isoform 2 preproprotein, Zonulin, BP, HP2ALPHA2, HPA1S

PRODUCT SPECIFICATION

Molecular Weight

37.7 kDa (338aa)

Concentration

0.25mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

HP, also known as haptoglobin isoform 2, is consists of two alpha and two beta chains, connected by disulfide bridges in its simplest form. The chains originate from a common precursor protein, which is proteolytically cleaved during protein synthesis. In blood plasma, this protein binds free hemoglobin released from erythrocytes with high affinity and thereby inhibits its oxidative activity. The haptoglobin-hemoglobin complex will then be

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removed by the reticuloendothelial system (mostly the spleen). It functions to bind free plasma hemoglobin, which allows degradative enzymes to gain access to the hemoglobin while at the same time preventing loss of iron through the kidneys and protecting the kidneys from damage by hemoglobin. For this reason, it is often referred to as the suicide protein. Recombinant human HP, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

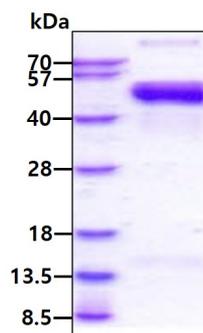
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<ADL>VDSGNDV TDIADDGCPK PPEIAHGYVE HSVRYQCKNY YKLRTEGDGV YTLNNEKQWI NKAVGDKLPE  
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VGKKQLVEIE KVVLPNYSQ VDIGLIKQ KSVNERNVMP ICLPSKDYAE VGRVGYVSGW GRNANFKFTD HLKYVMLPVA  
DQDQIRHYE GSTVPEKTP KSPVGVQPIL NEHTFCAGMS KYQEDTCYGD AGSAFAVHDL EEDTWYATGI LSFDKSCAVA  
EYGVYVKVTS IQDWVQKTI A EN<HHHHHH>
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General References

Kurosky, A., et al, (1980) Proc. Natl. Acad. Sci. U.S.A. 77:3388-3392.
Ofon E., et al, (2017) PLoS Negl Trop Dis 11:e0005979.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain