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## HP

## Native Human Haptoglobin Phenotype 1-1, Low Endotoxin

Catalog No. CSI19770A Quantity: 1.0 mg

CSI19770B 10 mg

Alternate Names: Haptoglobin, Hp 1-1, zonulin

**Description:** Haptoglobin, in its simplest form, consists of two alpha and two beta chains, connected

by disulfide bridges. The chains originate from a common precursor protein, which is proteolytically cleaved during protein synthesis. Hp exists in two allelic forms in the human population, so-called Hp1 and Hp2. Three phenotypes of Hp, therefore, are found in humans: Hp1-1, Hp2-1, and Hp2-2. Hp of different phenotype have been shown

to bind hemoglobin with different affinities, with Hp2-2 being the weakest binder.

Of the three haptoglobin phenotypes, Hp 1-1 is the most effective in binding free hemoglobin and in suppressing the inflammatory responses associated with free hemoglobin. Hp 1-1 protects against vascular complications in diabetes, is associated with sickle cell anemia, and is more common than other phenotypes in cases of cirrhosis. Individuals who are phenotype 1-1 have the highest concentration of haptoglobin in

plasma.

UniProt ID: P00738

**Gene ID:** 3240

**Concentration:** Lot specific, prior to lyophilization

Source: Human Plasma

Molecular Weight: 86 kDa

**Appearance:** Lyophilized from a salt-free solution

**Purity:**  $\geq$  95% by SDS-PAGE, no visible alpha-2 light chain

**Extinction Coefficient:**  $E^{0.1\%}_{280nm} = 1.20$ 

**Endotoxin:** < 0.001 EU/μg by PyroGene<sup>™</sup> rFC assay

Reconstitution: Centrifuge vial prior to opening. Reconstitute with deionized water to the original

volume followed by gentle mixing. Allow a few minutes for complete reconstitution. Do

not vortex.

**Storage & Stability:** Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare

aliquots (>20 μI) and store at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Infectious Disease

Statement:

Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and

E-mail: info@cellsciences.com

Website:

www.cellsciences.com

negative for anti-HIV 1 & 2 by FDA approved tests.

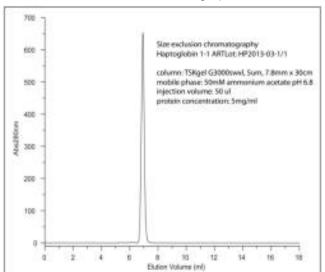
Toll Free: 888-769-1246

Phone: 978-572-1070

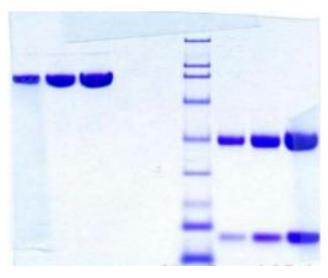
Fax: 978-992-0298

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SEC UV chromatograph



SDS-PAGE non-reduced & reduced



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Toll Free: 888-769-1246 Phone: 978-572-1070 Fax: 978-992-0298 E-mail: <u>info@cellsciences.com</u>
Website: <u>www.cellsciences.com</u>