

## HP

### Native Human Haptoglobin Phenotype 1-1

<b>Catalog No.</b>	CSI14650A	<b>Quantity:</b>	1.0 mg
	CSI14650B		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:** ≥ 95% by SDS-PAGE, no visible alpha-2 light chain

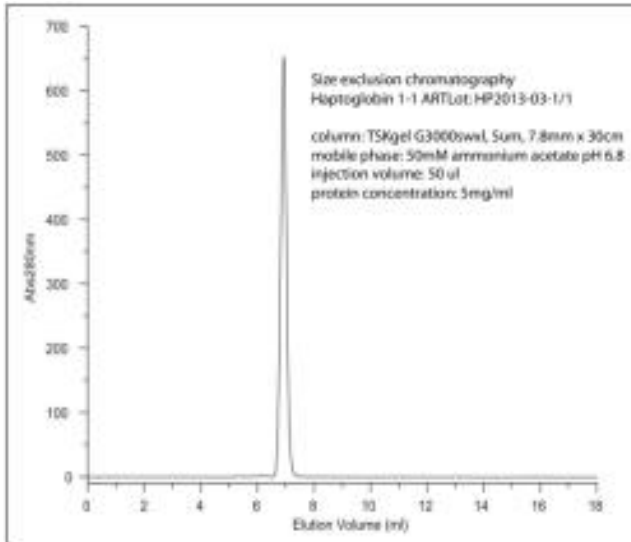
**Extinction Coefficient:**  $E^{0.1\%}_{280\text{nm}} = 1.20$

**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.** □

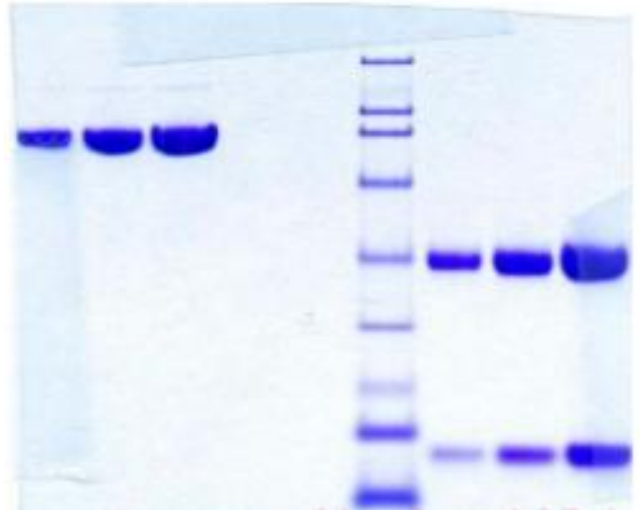
**Storage & Stability:** Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare aliquots (>20 µl) and store at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

**Certification:** Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

SEC UV chromatograph



SDS-PAGE non-reduced & reduced



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

