

## HP

### Native Human Haptoglobin Phenotype 2-2

<b>Catalog No.</b>	CSI19771A	<b>Quantity:</b>	1.0 mg
	CSI19771B		10 mg

**Alternate Names:** Haptoglobin, Hp 2-2, 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. Haptoglobin 2-2 (Hp 2-2) is the least effective of the three haptoglobin phenotypes in binding free hemoglobin and therefore provides less antioxidant benefits than Hp 1-1. Hp 2-2 is associated with renal failure, familial epilepsy, hypertension, atherosclerosis and coronary heart diseases. Individuals who are phenotype 2-2 have the lowest concentration of haptoglobin in plasma.

**UniProt ID:** P00738

**Original Volume:** Lot specific, prior to lyophilization

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

**Source:** Human plasma

**Molecular Weight:** 170-900 kDa

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

**Purity:** ≥ 95% by SDS-PAGE, no visible alpha-1 light chain

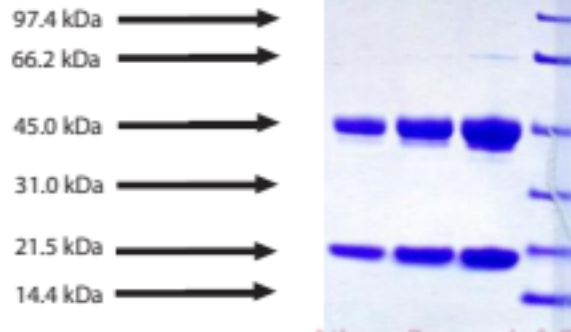
**Extinction Coefficient:**  $E^{0.1\%}_{280\text{nm}} = 1.20$

**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.**

**Infectious Disease Statement:** 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.

SDS-PAGE 4-12% Bis-Tris-HCl NuPAGE reduced



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