

## Recombinant Human Haptoglobin

Catalog No: CH71

<b>Description</b>	Recombinant Human Haptoglobin/Zonulin is produced by our E.coli expression system and the target gene encoding Cys145-Asn406 is expressed with a 6His tag at the N-terminus.
<b>Expression System</b>	E.coli
<b>Alternative name</b>	Haptoglobin;Zonulin;HP
<b>Accession No.</b>	P00738

<b>Quality Control</b>	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of PBS, 1mM DTT, pH7.4.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
-----------------	---

<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
----------------	--

<b>Background</b>	Haptoglobin(HP) is a secreted protein which is a member of the peptidase S1 family of serine proteases. As a result of hemolysis, hemoglobin is found to accumulate in the kidney and is secreted in the urine. Haptoglobin captures, and combines with free plasma hemoglobin to allow hepatic recycling of heme iron and to prevent kidney damage. Haptoglobin also acts as an Antimicrobial; Antioxidant has antibacterial activity and plays a role in modulating many aspects of the acute phase response. Hemoglobin/haptoglobin complexes are rapidly cleared by the macrophage CD163 scavenger receptor expressed on the surface of liver Kupfer cells through an endocytic lysosomal degradation pathway. Uncleaved haptoglobin, also known as zonulin, plays a role in intestinal permeability, allowing intercellular tight junction disassembly, and controlling the equilibrium between tolerance and immunity to non-self antigens.
-------------------	---

### SDS-PAGE

