

Recombinant Human Haptoglobin (C-6His)

Catalog No: CX97

Description	Recombinant Human Haptoglobin/Zonulin is produced by our Mammalian expression system and the target gene encoding Val19-Gln160(alpha chain)&Ile162-Asn406(beta chain) is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Haptoglobin; Zonulin; HP
Accession No.	P00738
Predicted Molecular Weight	15.9&28.3kDa
AP Molecular Weight	16&40-75kDa, reducing conditions.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Reconstitution	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100µg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
Quality Control	<p>Purity: Greater than 90% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.</p>
Shipping	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
Storage	<p>Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>

Background

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.

