

## Recombinant Human Haptoglobin/Zonulin Protein (aa 145-406, His Tag)

**Catalog Number:** PKSH032518

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

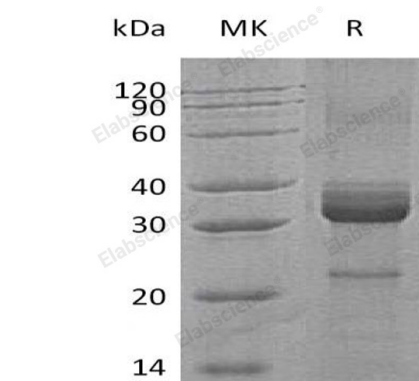
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human Haptoglobin;Zonulin protein Cys 145-Asn406, with an N-terminal His
<b>Calculated MW</b>	31.4 kDa
<b>Observed MW</b>	35 kDa
<b>Accession</b>	P00738
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 2mM EDTA, 5% Thehalose, pH 8.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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.