

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

Catalog No. PKSH032518

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

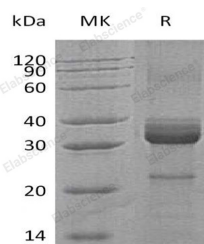
Description

Synonyms	Haptoglobin;Zonulin;HP
Species	Human
Expression Host	E.coli
Sequence	Cys145-Asn406
Accession	P00738
Calculated Molecular Weight	31.4 kDa
Observed molecular weight	35 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	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.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Haptoglobin(HP) is a secreted protein which is a member of the peptidase S1 family of serine proteases. As a result of

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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.