Recombinant Human Haptoglobin/Zonulin Protein (His Tag)

Catalog Number: PKSH032517

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

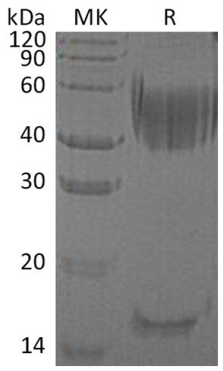
Description

Species	Human
Source	HEK293 Cells-derived Human Haptoglobin;Zonulin protein Val19-Gln160(alphachain)&Ile162-Asn406(betachain), with an C-terminal His
Calculated MW	15.9&28.3 kDa
Observed MW	16&40-75 kDa
Accession	P00738
Bio-activity	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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 PBS, pH 7.4. 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



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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 rapidely cleared by the macrophage CD163 scavenger receptor expressed on the surface of liver Kupfer cells through an endocytic lysosomal degradation pathway. Uncleaved haptoglogin; 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.