

Recombinant Human GBP1 Protein (His Tag)

Catalog Number: PKSH030815

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

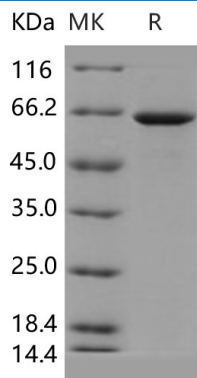
Description

Species	Human
Source	HEK293 Cells-derived Human GBP1 protein Met 1-Cys 589, with an C-terminal His
Calculated MW	69.0 kDa
Observed MW	65 kDa
Accession	AAA35871.1
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 °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 sterile 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



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Guanylate-binding protein 1 (GBP-1) is a member of the GBP family whose members are GTPases induced in response to interferon- λ (IFN- λ), with seven highly homologous members in humans, termed HuGBP-1 to HuGBP-7. GBP-1 expression is induced by type1 and type2 interferons, including IFN- λ ; and also by interleukin-1 β (IL-1 β), IL-1 α , and tumor necrosis factor- α (TNF- α). GBP-1 is key to the protective immunity against microbial and viral pathogens. GBP-1 was only secreted from endothelial cells. Secretion occurred without the presence of a leader peptide. Secretion procession is a nonclassical, likely ABC transporter-dependent, pathway and independent of GBP-1 GTPase activity and isoprenylation, and did not require additional interferon- λ -induced factors. Clinically most important was the detection of significantly increased GBP-1 concentrations in the cerebrospinal fluid of patients with bacterial meningitis as compared to control patients.