Recombinant Protein Technical Manual

Recombinant Human GBP1 Protein (His Tag)

RPES2474

Product Data:

Product SKU: RPES2474

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: AAA35871.1

Protein Information:

Molecular Mass: 69 kDa

AP Molecular Mass: 65 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ 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 sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: GBP1

Immunogen Information:

Sequence: Met 1-Cys 589

Background:

Guanylate-binding protein 1 (GBP) 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 to HuGBP-7. GBP expression is induced by type1 and type2 interferons, including IFN-λ and also by interleukinβ (ILβ), ILα, and tumor necrosis factor-α (TNF-α). GBP is key to the protective immunity against microbial and viral pathogens. GBP 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 GTPase activity and isoprenylation, and did not require additional interferon-λ-induced factors. Clinically most important was the detection of significantly increased GBP concentrations in the cerebrospinal fluid of patients with bacterial meningitis as compared to control patients.