



Recombinant Protein Technical Manual
Recombinant Human Granzyme B/GZMB Protein
(His Tag)
RPES4507

Product Data:

Product SKU: RPES4507

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_004122.1

Protein Information:

Molecular Mass: 27 kDa

AP Molecular Mass: 36 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % 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°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

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

Application:

Synonyms: CCPI;CGL;CGL1;CSP-B;CSPB;CTLA1;CTSG1;HLP;SECT

Immunogen Information:

Sequence: Met 1-Tyr 247

Background:

Granzyme B, also known as GZMB, is the most prominent member of the granzyme family of cell death-inducing serine proteases expressed in the granules of cytotoxic T lymphocytes (CTLs) and NK cells. Granzyme B enters the target cells depending on another membrane-binding granule protein, perforin, results in the activation of effector caspases and mitochondrial depolarization through caspase-dependent and -independent pathways, and consequently induces rapid cell apoptosis. Over 30 substrates of GZMB have been identified including the key substrate caspase-3, ICAD and Bid. GZMB is suggested to protect the host by lysing cells bearing on their surface 'nonself' antigens such as bacterial and viral infected-cells and tumor cells, and accordingly plays an essential role in immunosurveillance.