## AssayGenie

## Product Data:

Product SKU: RPES3947
Species: Human

Size: $50 \mu \mathrm{~g}$
Expression host: E. coli

Uniprot: NP_001531.1

Protein Information:
Molecular Mass: 28 kDa
AP Molecular Mass: 28 kDa
Tag: C-His
Bio-activity:
Purity: $\quad>97 \%$ as determined by reducing SDS-PAGE.
Endotoxin: Please contact us for more information.
Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to $-80^{\circ} \mathrm{C}$. Reconstituted protein solution can be stored at $4-8^{\circ} \mathrm{C}$ for $2-7$ days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.
Formulation: Lyophilized from sterile 20 mM HEPES, $0.1 \mathrm{M} \mathrm{KCl}, \mathrm{pH} 7.5$
Reconstitution: Please refer to the printed manual for detailed information.

## Application:

Synonyms:
CMT2F;HEL-S02;HMN2B;HS.76067;Hsp25;HSP27;HSP28;SRP27

Immunogen information:
Sequence: Met 1-Lys205

## Background:

Granzyme B, also known as GZMB, is the most prominent member of the granzyme family of cell deathinducing 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.

