

# Recombinant Human Granzyme B/GZMB Protein (His Tag)



Catalog Number:PKSH031663

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

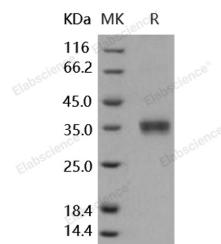
## Description

<b>Synonyms</b>	CCPI;CGL-1;CGL1;CSP-B;CSPB;CTLA1;CTSGL1;HLP;SECT
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Tyr 247
<b>Accession</b>	NP_004122.1
<b>Calculated Molecular Weight</b>	27.0 kDa
<b>Observed molecular weight</b>	36 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 97 % as determined by reducing SDS-PAGE.

## 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.

## For Research Use Only

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Fax: 1-832-243-6017