

Recombinant Human Granzyme A protein (mFc Tag) (HPLC verified)

Catalog Number: Eg3925

Basic Information

Species:
Human**Purity:**
>90 %, SDS-PAGE
SEC-HPLC**Tag:**
mFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
>90%, SEC-HPLC**Endotoxin Level:**
<0.1 EU/ µg protein, LAL method**Source:**
HEK293-derived Human Granzyme A protein Glu27-Val262 (Accession# P12544-1) with a mouse IgG Fc tag at the C-terminus.**GeneID:**
3001**Accession:**
P12544-1**Predicted Molecular Mass:**
52.7 kDa**SDS-PAGE:**
50-60 kDa, reducing (R) conditions**Formulation:**
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Granzyme A (GzmA) is a serine protease primarily expressed by cytotoxic T lymphocytes and natural killer (NK) cells, playing a critical role in immune-mediated cytotoxicity. It is involved in the elimination of target cells, such as virus-infected cells or tumor cells, by inducing apoptosis. GzmA is associated with various diseases, particularly those involving immune responses and inflammation. It plays a significant role in the pathogenesis of sepsis, where its inhibition reduces inflammation and increases survival.

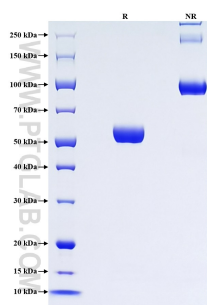
References

- 1.Zhou Z. et al. (2020). Science. 368(6494):eaaz7548.
- 2.Hay ZLZ. et al. (2022). Int J Mol Sci. 23(3):1833.
- 3.Garzón-Tituaña M. et al. (2021). Theranostics. 11(8):3781-3795.

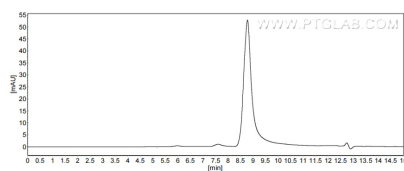
Synonyms

GrA, GZMA, CTL tryptase, CTLA3, Cytotoxic T-lymphocyte proteinase 1

Selected Validation Data



Purity of Recombinant Human Granzyme A was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Human Granzyme A was greater than 90% as determined by SEC-HPLC.