For Research Use Only

Recombinant Rat Beta-2-Microglobulin protein (rFc Tag) (HPLC verified)

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Catalog Number: Eg3270

Basic Information

Species:
Rat

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Rat Beta-2-Microglobulin protein Ile21-Met119 (Accession# P07174) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
24223

Accession:
P07151

Predicted Molecular Mass:
37.9 kDa

SDS-PAGE:
38-45 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m 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℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ 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

Beta-2-microglobulin (B2M) is a 12-kDa protein comprised of 99 amino acids. B2M is a component of MHC class I molecules, which are present on the surface of nearly all nucleated cells. It can be found in body fluids under physiologic conditions as a result of shedding from cell surfaces or intracellular release. B2M has various biological functions, including antigen presentation. Serum B2M is regarded as a marker of disease severity in renal injury, infections, amyloidosis, and aging-related diseases. Investigations reveal that increased synthesis and release of B2M are present in several malignant diseases including multiple myeloma, lymphoma, and solid tumors.

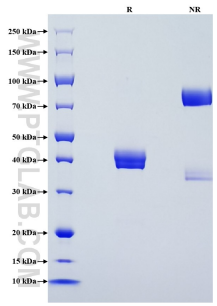
References

1. D Güssow, et al. (1987) J Immunol. 139(9):3132-8.
2. Jin Xie, et al. (2003) Blood. 101(10):4005-12.
3. Takeo Nomura, et al. (2014) Anticancer Agents Med Chem. 14(3):343-52..
4. Hanbing Wang, et al. (2021) Cancer Lett. 517:96-104.

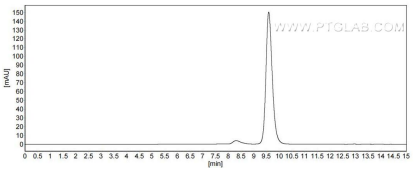
Synonyms

B2m, beta 2-Microglobulin, Beta-2-microglobulin form pI 5.3, CDABP0092, HDCMA22P

Selected Validation Data



Purity of Recombinant Rat Beta-2-Microglobulin 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 Rat Beta-2-Microglobulin was greater than 90% as determined by SEC-HPLC.