

RP00724

Leader in Biomolecular Solutions for Life Science



Recombinant Human PBEF/Visfatin/NAMPT Protein

Catalog No.: RP00724

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
<i>E. coli</i>	10135	P43490

Tags

NO-tag

Synonyms

NAMPT;1110035O14Rik;PBEF;PBEF1;VF;
;VISFATIN

Product Information

Source

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Purification

≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μm filtered solution of 20mM HEPES, 150mM NaCl, pH8.0. Contact us for customized product form or formulation.

Background

Pre-B cell colony enhancing factor (PBEF) was originally identified as a cytokine that potentiated the clonal expansion and differentiation of pre-B cells, but it is also acknowledged to be the ubiquitous intracellular enzyme nicotinamide phosphoribosyltransferase (NAMPT) and the adipokine "visfatin". PBEF is constitutively expressed in the fetal membranes where its greatest expression is in the amnion. It has intracellular and extracellular forms. Most of the intracellular functions of PBEF are due to its role as a Nampt which can induce angiogenesis through upregulation of VEGF and VEGFR and secretion of MCP-1. Extracellular PBEF has been shown to increase inflammatory cytokines, such as TNF-α, IL-1β, IL-16, and TGF-β1. PBEF also increases the production of IL-6, TNF-α, and IL-1β in CD14+ monocytes, macrophages, and dendritic cells, enhances the effectiveness of T cells.

Basic Information

Description

Recombinant Human PBEF/Visfatin/NAMPT Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Asn2-His491) of human Visfatin/Nampt (Accession #P43490) fused with no additional amino acid.

Bio-Activity

Measured in a cell proliferation assay using RPMI 8226 cells. The ED50 for this effect is 1.72 ± 6.89 ng/mL, corresponding to a specific activity of 1.45 × 10⁵ ~ 5.81 × 10⁵ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C. Avoid repeated freeze/thaw cycles.

Reconstitution

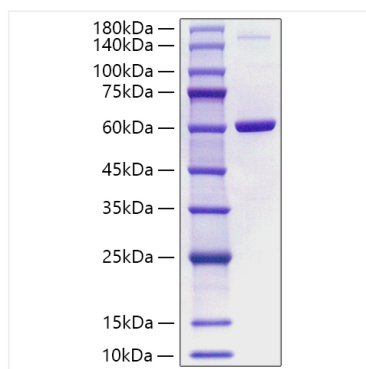
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Contact

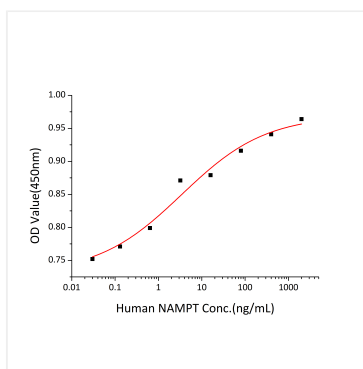


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Validation Data



Recombinant Human PBEF/Visfatin/NAMPT Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human Visfatin/Nampt stimulates cell proliferation of the RPMI 8226 cells. The ED_{50} for this effect is $1.72 \times 10^{-6.89}$ ng/mL, corresponding to a specific activity of $1.45 \times 10^5 \sim 5.81 \times 10^5$ units/mg.