ABclonal®

Recombinant Human PBEF/Visfatin/NAMPT Protein

Catalog No.: RP00724 Recombinant

Sequence Information

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

Tags

NO-tag

Synonyms

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

Product Information

Source Purification
<I>E. coli</I> > 95% by SDSPAGE.

Endotoxin

< 1 EU/ μ g 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.

Reconstitution

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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

www.abclonal.com

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 phosphoribosyltranferase (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-1 β , IL-16, and TGF- β 1. PBEF also increases the production of IL-6, TNF- α , and IL-1 β in CD14+ monocyctes, macrophages, and dendritic cells, enhances the effectiveness of T cells.

Basic Information

Description

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

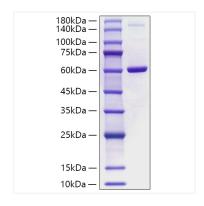
Bio-Activity

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 $1.45 \times 105 \sim 5.81 \times 105$ units/mg.

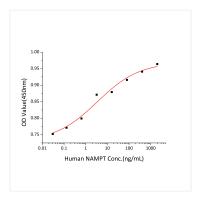
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.
 After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human Visfatin/Nampt Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 60-65 kDa.



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