

Recombinant Human PBEF/NAMPT Protein (His Tag)

Catalog No. PDEH100011

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

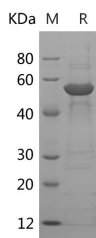
Description

Synonyms	Pre-B cell-enhancing factor;Nicotinamide phosphoribosyltransferase;NAmpRTase;Nampt;Pre-B-cell colony-enhancing factor 1;Visfatin;NAMPT;PBEF;PBEF1
Species	Human
Expression Host	E.coli
Sequence	Met1-His491
Accession	P43490
Calculated Molecular Weight	57.0 kDa
Observed molecular weight	55 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

Data



> 90 % as determined by reducing SDS-PAGE.

For Research Use Only

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