



Recombinant Protein Technical Manual  
Recombinant Human PBEF/NAMPT Protein (His Tag)  
RPES0421

### Product Data:

**Product SKU:** RPES0421

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P43490

### Protein Information:

**Molecular Mass:** 57 kDa

**AP Molecular Mass:** 55 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 90% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 HEPES, 150mM NaCl, pH8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Pre-B cell-enhancing factor; Nicotinamide phosphoribosyltransferase; NAMPRtase; Nampt; Pre-B-cell colony-enhancing factor 1; Visfatin; NAMPT; PBEF; PBEF1

## Immunogen Information:

**Sequence:** Met1-His491

## 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. Extracellular PBEF has been shown to increase inflammatory cytokines, such as TNF- $\alpha$ , IL $\beta$ , IL6, and TGF- $\beta$ 1. PBEF also increases the production of IL-6, TNF- $\alpha$ , and IL $\beta$  in CD14+ monocytes, macrophages, and dendritic cells, enhances the effectiveness of T cells.