Data Sheet (Cat.No.TMPJ-00968)

TargetMol

NAMPT Protein, Human, Recombinant (His)

General Information

Synonyms:	PBEF;PBEF1;Nicotinamide phosphoribosyltransferase;NAmPRTase;Pre-B cell-enhancing factor;NAMPT;Pre-B-cell colony-enhancing factor 1;Visfatin
Protein Construction:	Met1-His491
Species:	Human
Expression Host:	E. coli
Accession:	P43490
Molecular Weight:	55 KDa (reducing condition)
AA Sequence:	Met1-His491

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 90% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM PB, 10% Trehalose, 100 mM Arg-HCl, 0.02% Tween 80, pH6.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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-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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481