NAMPT Protein, Mouse

Cat. No.:	HY-P701314
Synonyms:	rHuNicotinamide phosphoribosyltransferase/NAMPT, His; Pre-B cell-enhancing factor; Nicotinamide phosphoribosyltransferase; NAmPRTase; Nampt; Pre-B-cell colony-enhancing factor 1; Visfatin; NAMPT; PBEF; PBEF1
Species:	Mouse
Source:	E. coli
Accession:	Q99KQ4 (M1-H491)
Gene ID:	59027
Molecular Weight:	56 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The NAMPT protein exhibits dual functionality, acting both as a cytokine with immunomodulating properties and as an adipokine with anti-diabetic properties. Interestingly, its secreted form lacks enzymatic activity, attributed in part to the limited activation by ATP in the extracellular space and plasma due to its low levels. Functionally, NAMPT catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate, yielding nicotinamide mononucleotide—an intermediate crucial in the biosynthesis of NAD. As the rate-limiting component in the mammalian NAD biosynthesis pathway, NAMPT plays a pivotal role in modulating circadian clock function. Its NAMPT-dependent oscillatory production of NAD governs the oscillation of clock target gene expression by releasing the core clock component, the CLOCK-BMAL1 heterodimer, from NAD-dependent SIRT1-mediated suppression.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA