

Human NAMPT/Visfatin Low Endotoxin Low Endotoxin & Sterilized

Cat# CY-R2471

Amount: 100 µg (1.0 µg/µl)

Lot:

Introduction:

Nicotinamide phosphoribosyltransferase (NAMPT), also known as visfatin and pre-B-cell colony-enhancing factor 1 (PBEF1), is the rate-limiting enzyme that converts nicotinamide to nicotinamide mononucleotide (NMN) in the salvage pathway of NAD biosynthesis from nicotinamide in mammals. Nicotinamide mononucleotide adenylyltransferase 1 converts NMN to NAD. The expression of NAMPT is upregulated during activation of immune cells such as monocytes, macrophages, dendritic cells, T and B cells, as well as in amniotic epithelial cells upon stimulation with several inflammatory cytokines. Conversely, NAMPT induces cytokines production, such as IL-1 β , IL-1Ra, IL-6, IL-10, and TNF- α in human leukocytes and also increases surface expression of CD54, CD40, and CD80. NAMPT stimulation enhances phagocytic activity and signal transduction through p38 and MEK1 pathways. These studies indicate that visfatin is a proinflammatory cytokine and/or adipocytokine. NAMPT-specific inhibitor, FK855, was found to deplete intracellular NAD content, resulting in apoptotic cell death in many cancer cell lines without any DNA damaging effect.

Product Description:

Full length of human Nicotinamide phosphoribosyltransferase (NAMPT), containing an N- and C-terminal His tag, expressed in *E. coli*.

Gene Information:

The gene accession number is NM_005746.

Gene Aliases:

Visfatin, Pre-B-cell colony-enhancing factor 1; PBEF1

Formulation:

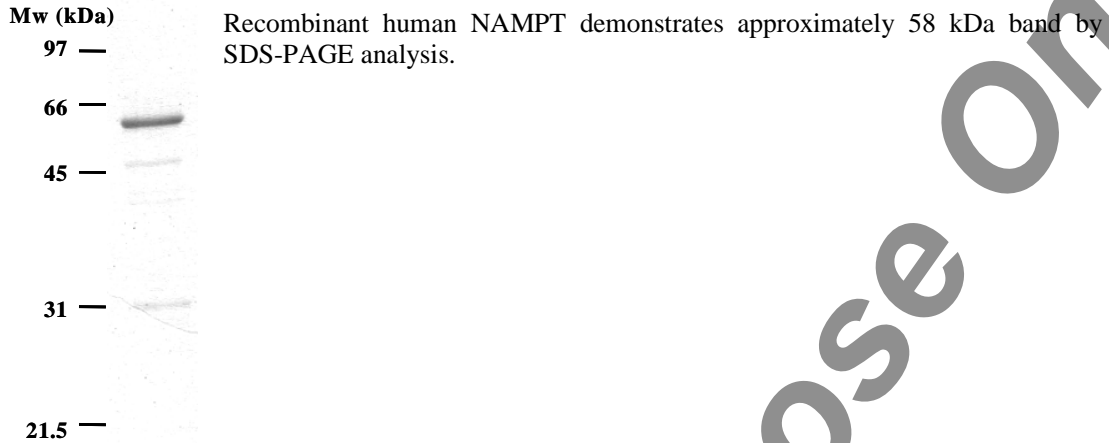
Recombinant human NAMPT is supplied frozen in 2X phosphate buffered saline (2X PBS) containing 50 % glycerol.

Endotoxin Concentration:

< 0.01 EU/µg as determined by Limulus Amebocyte Lysate (LAL) assay

Purity:

> 90 % as determined by SDS PAGE

Molecular Weight: 58kDa**Storage:**

Store product at -70°C . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

Stability:

Unopened vial at -70°C , for 1 year after delivery.

References:

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4. Nau GJ, Richmond JF, Schlesinger A, Jennings EG, Lander ES, et al. (2002) *Proc Natl Acad Sci U S A* 99: 1503–1508.
5. Huang Q, Liu D, Majewski P, Schulte LC, Korn JM, et al. (2001) *Science* 294: 870–875.
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Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

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