www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

Visfatin Human

Description: Visfatin Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 348 amino acids and having 11 N-terminal flag tag The total molecular mass is 39.6 kDa (calculated). The amino acid sequence of the recombinant human Visfatin is 100% homologous to the amino acid sequence Pro27-Glu363 of the human Visfatin.The Visfatin is purified by Flag-affinity chromatography.

Synonyms:PBEF, Pre-B cell colony-enhancing factor, Nicotinamide phosphoribosyltransferase NAmPRTase, Nampt, MGC117256, DKFZP666B131, 1110035O14Rik.

Source: Escherichia Coli.

Physical Appearance: Filtered White lyophilized (freeze-dried) powder.

Amino Acid Sequence:MDYKDDDDKA SPPNTSKVYS YFECREKKTE NSKLRKVKYE ETVFYGLQYI LNKYLKGKVV TKEKIQEAKD VYKEHFQDDV FNEKGWNYIL EKYDGHLPIE IKAVPEGFVI PRGNVLFTVE NTDPECYWLT NWIETILVQS WYPITVATNS REQKKILAKY LLETSGNLDG LEYKLHDFGY RGVSSQETAG IGASAHLVNF KGTDTVAGLA LIKKYYGTKD PVPGYSVPAA EH

Purity: Greater than 95.0% as determined by SDS-PAGE.

Formulation:
Filtered (0.4

Stability:
Lyophilized Visfatin althoμgh stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Visfatin should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Usage:
NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drμgs, agricultural or pesticidal products, food additives or household chemicals.

Solubility:
It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. Visfatin is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Introduction:
Excess adiposity is the most important risk in the development of insulin resistance and type 2 diabetes mellitus (T2DM). Adipose tissue produces several proteins (adipocytokines) such as leptin, adiponectin, resistin, tumor necrosis factor-, and IL-6, that modulate insulin sensitivity and appear to play an important role in the pathogenesis of insulin resistance, diabetes, dyslipidemia, inflammation, and atherosclerosis. However, the mechanisms by which fat tissue induces insulin resistance and the role of adipocytokines in the pathogenesis of T2DM have not been well established. Visfatin, also known as pre-B cell colony-enhancing factor (PBEF), is a cytokine that is highly expressed in visceral fat and was originally isolated as a secreted factor that synergizes

with IL-7 and stem cell factors to promote the growth of B cell precursors. Visfatin homologs have been identified in carp, invertebrate mollusks, and bacteria, as well as in vertebrates, including humans and the mouse. It has been postulated to play a role in innate immunity.Visfatin exerts insulin-mimetic effects that are dose-dependent and quantitatively similar to those of insulin in stimulating muscle and adipocyte glucose transport, and in inhibiting hepatocyte glucose production. Intravenous injection of recombinant visfatin in mice decreased plasma glucose in a dose-dependent fashion. In keeping with its insulin-mimetic effects, visfatin was as effective as insulin in reducing hyperglycemia in insulin-deficient diabetic mice. Visfatin was also found to be bound to and activate insulin receptor, causing receptor phosphorylation and the activation of downstream signaling molecules. However, visfatin and insulin did not compete for binding to the insulin receptor, indicating that the two proteins were recognized by different regions of the receptor. Thus, visfatin might play a role in glucose homeostasis and dysregulation in biosynthesis or signal transduction, and might contribute to the pathogenesis of diabetes.

To place an order, please Click HERE.

Catalog #:CYPS-325

For research use only.