

**TECHNICAL DATA SHEET**

# Recombinant Human Visfatin (Carrier-free)

Catalog Number: 21-7092

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human Visfatin (Carrier-free)

**DESCRIPTION**

Visfatin, also known as pre-B cell colony enhancing factor (PBEF) is an adipocytokine belonging to the NAPRTase family and is produced and secreted primarily by white adipose tissue. Like insulin, Visfatin exerts hypoglycemic effects by interacting with the insulin receptor. Visfatin does not, however, compete with insulin for binding to this shared receptor and circulating levels of visfatin are much lower than that of insulin. Furthermore, the levels of visfatin are not influenced by food intake. The plasma Visfatin levels, like those of Leptin, correlate positively with the percent of body fat and increase during the development of obesity. The expression of Visfatin is upregulated by hypoxia, inflammation and hyperglycemia and downregulated by insulin, somatostatin and statins.

**MOLECULAR MASS**

Recombinant human Visfatin is a 52.6 kDa protein containing 466 amino acid residues (isoform 1).

**AMINO ACID SEQUENCE**

MPPNTSKVYS YFECREKTE NSKLRKVYKYE ETVFYGLQYI LNKYLKGVV TKEKIQEAKD VYKEHFQDDV FNEKGWNYIL EKYDGHLP  
 IKAVPEGFVI PRGNVLFVTE NTDPECYWLT NWIETILVQS WYPITVATNS REQKILAKY LLETSGNLDG LEYKLHDFGY RGVSSQETAG  
 IGASAHLVNF KGTDTVAGLA LIKKYYGTKD PVPGYVPAE EHSTITAWGK DHEKDAFEHI VTQFSSVPVS VVSDSYDIYN ACEKIWGDL  
 RHLIVSRSTQ APLIIRPDGS NPLDVLKVL EILGKKFPVT ENSKGYKLLP PYLRVIQGDG VDINTLQEI VEGMKQKMWSI ENIAFGSGGG  
 LLQKLTRDLL NCSFKCSYVV TNGLGINVFK DPVADPNKRS KKGRLSLHRTP AGNFVTLLEEG KGDLEEYQD LLHTVFKNGKV  
 TKSYSFDEIR KNAQLNIELEA AHH

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

**BIOACTIVITY**

The ED<sub>50</sub> was determined by the dose-dependant proliferation of the RPMI 8226 cells. The expected ED<sub>50</sub> for this effect is 15.0-20.0 ng/ml.

**RESEARCH AREAS**

Diabetes / Weight Regulation; Lipid Metabolism

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Pilz S, Mangge H, Obermayer-Pietsch B and Marz W. 2007. J Endocrinol Invest. 30(2): 138-144. Stephens JM and Vidal-Puig AJ. 2006. Current Opin Lipidol. 17(2): 128-131. Moschen AR, Gerner RR and Tilg H. 2010. Curr Pharm Des. 16(17): 1913-1920. Luk T, Malam Z and Marshall JC. 2008. J Leukoc

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