**PRODUCT DATASHEET**

**Fibroblast Growth Factor 23 C-terminal Peptide Human E. coli**

**Cat. No.:** RD172241100  
**Type:** Recombinant protein  
**Size:** 0.1 mg  
**Source:** E. coli  
**Species:** Human

**Description**  

**Other names**  
Phosphatonin, Tumor-derived hypophosphatemia-inducing factor, FGF23, HYPF, UNQ3027/PRO9828

**Introduction to the molecule**  
FGF-23 is a secreted, nonglycosylated monomeric protein belonging to the FGF family. Full-length FGF-23 is a phosphaturic hormone which blocks neural phosphate reabsorption. Upon processing, biologically inactive N- and C-terminal fragments are generated. Defects in FGF-23 is associated with autosomal dominant hypophosphatemic rickets. The FGF-23 gene encodes a member of the fibroblast growth factor family that is mutant in autosomal dominant hypophosphatemic rickets (ADHR). Tumor-induced osteomalacia is one of the paraneoplastic disorders characterized by hypophosphatemia caused by renal phosphate wasting. The fact that removal of responsible tumors normalizes phosphate metabolism is evidence that a humoral phosphaturic factor, sometimes called phosphatonin, is the basis of tumor-induced osteomalacia. Thus, overproduction of FGF-23 causes tumor-induced osteomalacia, whereas mutations in the FGF-23 gene result in autosomal hypophosphatemic rickets possibly by preventing proteolytic cleavage, which enhances the biologic activity of FGF-23. The mutations in FGF-23 found in ADHR lie within 3 nucleotides of each other in the proprotein convertase cleavage site. Jonsson et al. (2003) showed that FGF-23 is readily detectable in the plasma or serum of healthy persons and can be markedly elevated in those with oncogenic osteomalacia or X-linked hypophosphatemia, suggesting that this growth factor has a role in phosphate homeostasis.

**Research topic**  
Energy metabolism and body weight regulation, Renal disease

**Amino Acid sequence**  
MKHHHHHAS AEDDSERDPL NVLKPRARMT PSAEDNSPMA SDPLGVVRGG RVNTHAGGTG PEGCRPFAKF IP

**Purity**  
Purity as determined by densitometric image analysis: >90%

**Endotoxin**  
<1.0 EU/µg

**Formulation:**  
Filtered (0.4 μm) and lyophilized in 0.5 mg/mL in 20mM TRIS, 50mM NaCl, pH 7.5

**Reconstitutioyn:**  
Add deionized water to prepare a working stock solution of 0.5 mg/mL and let the lyophilized pellet dissolve completely. Filter sterile your culture media/working solutions containing this non-sterile product before using in cell culture.

**Shipping**  
At ambient temperature. Upon receipt, store the product at the temperature recommended below.

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There are BioVendor branches and distributors near you. To find the office closest to you, visit www.biovendor.com/contact
Storage, Stability/Shelf Life
Store lyophilized protein at –80°C. Lyophilized protein remains stable until the expiry date when stored at –80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at –80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality control
BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL to determine quantity of endotoxin.

Applications
Western blotting

Note
This product is intended for research use only.