

Recombinant human FGF-23 protein

Catalog Number: ATGP3852

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

25-251aa

UniProt No.

Q9GZV9

NCBI Accession No.

NP_065689

Alternative Names

Fibroblast growth factor 23, FGF23, ADHR, FGFN, HFTC2, HPDR2, HYPF, PHPTC

Additional Information

N- terminal Sequence Analysis: Ser-Ala-Glu-Asp-Asp

PRODUCT SPECIFICATION

Molecular Weight

26.4 kDa (236aa)ns

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 2mM DTT, 1mM EDTA, 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

FGF-23, also known as fibroblast growth factor 23, is a member of the FGF family which is responsible for

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phosphate and vitamin D metabolism. The main function of this protein seems to be regulation of phosphate concentration in plasma. It is secreted by osteocytes in response to elevated calcitriol and acts on the kidneys, where it decreases the expression of NPT2, a sodium-phosphate cotransporter in the proximal tubule. Thus, FGF-23 interaction with renal proximal tubular epithelium decreases the reabsorption and increases excretion of phosphate. This protein may also suppress 1-alpha-hydroxylase, reducing its ability to activate vitamin D and subsequently impairing calcium absorption. Following secretion this protein is inactivated by cleavage into a N-terminal fragment and a C-terminal fragment. The N-terminal sequence analysis is showing that a C-terminal fragment is detected. Recombinant human FGF-23, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

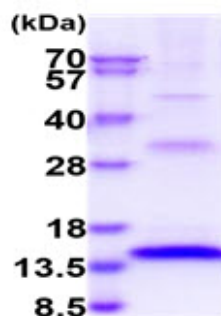
ADPYPNASPL LGSSWGGLIH LYTATARNYS HLQIHKNGHV DGAPHQTIYS ALMIRSEDAG FVVITGVMSR RYLCMDFRGN
IFGSHYFDPE NCRFQHQTLE NGYDVYHSPQ YHFLVSLGRA KRAFLPGMNP PPYSQFLSRR NEIPLHFNT PIPRRHTRSA
EDDSERDPLN VLKPRARMTP APASCSQELP SAEDNSPMAS DPLGVVRGGR VNTHAGGTGP EGCRPFAKFI HHHHHH

General References

Shimada T., et al, (2001) Proc. Natl. Acad. Sci. U.S.A. 98:6500-6505.
Mohammadi M., et al, (2005) Cytokine Growth Factor Rev. 16:107-137.

DATA

SDS-PAGE

15% SDS-PAGE (3 μ g)

3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.