83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877

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Product Datasheet

Product Name Fibroblast Growth Factor-23 Human Recombinant

Cata No CB500276

Source Escherichia Coli.

Synonyms Tumor-derived hypophosphatemia-inducing factor, HYPF, ADHR, HPDR2, PHPTC,

FGF23, FGF-23, Fibroblast Growth Factor-23.

Description

FGF-23 is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-23 inhibits renal tubular phosphate transport. This gene was identified by its mutations associated with autosomal dominant hypophosphatemic rickets (ADHR), an inherited phosphate wasting disorder. Abnormally high level expression of FGF23 was found in oncogenic hypophosphatemic osteomalacia (OHO), a phenotypically similar disease caused by abnormal phosphate metabolism. Mutations FGF23 have also been shown to cause familial tumoral calcinosis with hyperphosphatemia.

Fibroblast Growth Factor-23 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 243 amino acids and having a molecular mass of 28629.5 Dalton.

The FGF-23 is expressed with a -6xHis tag and purified by chromatographic techniques.

Physical Appearance

Sterile Filtered white lyophilized powder.

Biological Activity

Treatment with hrFGF23 has been shown to induce FGFR mediated Erk phosphorylation, reduce

plasma PTH levels in rats and to reduce blood phosphate levels (Ref 1).

Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein (0.5mg/ml) was lyophilized from 25mM Tris pH7.5 and 0.6M NaCl solution.

Stability

Lyophilized Fibroblast Growth Factor 23 although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution FGF-23 should be stored at 4℃ between 2-7 days and for future use below -18℃.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

MLGARLRLW VCALCSVCSM SVLRAYPNAS PLLGSSWGG

NSYHLQIHKN GHVDGAPHQT IYSALMIRSE DAGFVVITGV MSRRYLCMDF RGNIFGSHYF DPENCRFQHQ TLENGYDVYH SPQYHFLVS LGRAKRAFLP GMNPPPYSQF LSRRNEIPLI HFNTPIPRRH TRSAEDDSER DPLNVLKPRA RMTPAPASCS QELPSAEDNS PMASDPLGVV RGGRVNTHAG GTGPEGCRPF AKI HHHHHH

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