

32-1201: FGF 23 His Recombinant Protein

Alternative Name : Tumor-derived hypophosphatemia-inducing factor, HYPF, ADHR, HPDR2, PHPTC, FGF23, FGF-23, Fibroblast Growth Factor-23.

Description

Source : Escherichia Coli. Fibroblast Growth Factor-23 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain expressed with a -6xHis tag containing a total of 257 amino acids (251 a.a. FGF23+ 6 a.a. His tag) and having a molecular mass of 28629.5 Dalton. The FGF-23 is and purified by chromatographic techniques. 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.

Product Info

Amount : 10 µg
Purification : Greater than 90.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content : The protein (0.5mg/ml) was lyophilized from 25mM Tris pH7.5 and 0.6M NaCl solution.
Storage condition : Lyophilized Fibroblast Growth Factor 23 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-23 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.
Amino Acid : MLGARLRLWVCALCSVCSMSVLRAYPNASPLLGSWGLIHLTYTATARNSYHLQIHKNGHVDGAPHQTIYSAL
MIRSEDAGFVVITGVMSRRYLCMDFRGNIFGSHYFDPENCRFQHQTLNENGYDVIHSPQYHFLVSLGRAKRAFL
PGMNPYPYSQFLSRNEIPLIHFNTPIPRRHTRSAEDDSERDPLNLKPRARMTPAPASCSQELPSAEDNSPMAS
DPLGVVRGGRVNTNTHAGGTGPEGCRPFAKFIHHHHHH.

Application Note

It is recommended to reconstitute the lyophilized Fibroblast Growth Factor-23 in sterile 18MΩ·cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. Treatment with hrFGF23 has been shown to induce FGFR mediated Erk phosphorylation, reduce plasma PTH levels in rats and to reduce blood phosphate levels.