

32-1200: FGF 23 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 containing a total of 228 amino acids and having a molecular mass of 22.5kDa. 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. The FGF-23 gene was identified by its mutations associated with autosomal dominant hypophosphatemic rickets (ADHR), an inherited phosphate wasting disorder. Abnormally high level expression of FGF-23 was found in oncogenic hypophosphatemic osteomalacia (OHO), a phenotypically similar disease caused by abnormal phosphate metabolism. FGF-23 mutations have also been shown to cause familial tumoral calcinosis with hyperphosphatemia.

Product Info

Amount : 20 µg
Purification : Greater than 95.0% as determined by SDS-PAGE.
Content : The FGF-23 protein (0.5mg/ml) was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Storage condition : Lyophilized FGF-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 : MYPNASPLLG SSWGGLIHLY TATARN SYHL QIHKNGHVDG APHQTIYSAL MIRSEDAGFV VITGVMSRRY LCMDFRGNIF GSHYFDPENC RFQHQTLENG YDVYHSPQYH FLVSLGRAKR AFLPGMNPPP YSQFLSRRNE IPLIHFNTP IPRRHTRSAED DSERDPLNVL KPRARMTPAP ASCSQELPSA EDNSPMASDP LGVVRGGRVN THAGGTGPEG CRPFAKFI.

Application Note

It is recommended to reconstitute the lyophilized FGF-23 in sterile 18M-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. The biological activity of FGF-23 was measured in a cell proliferation assay using NIH/3T3 mouse embryonic fibroblasts. The ED₅₀ for this effect is typically 0.05-0.5 µg/ml in the presence of 5 µg/ml of Recombinant Mouse Klotho and 10 µg/ml of heparin.