

## 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 SSWGGLIHL Y TATARN SYHL QIHKNGHV DG APHQTIYSAL MIRSEDAGFV VITGVMSRRY LCMDFRGNIF GSHYFDPENC RFQHQTLENG YDVYHSPQYH FLVSLGRAKR AFLPGMNPPP YSQFLSRRNE IPLIHFNTP I PRRHTRSAED DSERDPLNVL KPRARMTPAP ASCSQELPSA EDNSPMASDP LGVVRGGRVN THAGGTGPEG CRPFAKFI.

### Application Note

It is recommended to reconstitute the lyophilized FGF-23 in sterile 18M-cm H<sub>2</sub>O 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 ED<sub>50</sub> 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.

