

Technical Data Sheet

Product Name: FGF 23 Recombinant Protein

Catalogue Number: BPBOI043

Volume: 10µg-10mg

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 : 10 µg- 10 mg

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: MYPNASPLLGS SWGGLIHL TATARNSYHL QIHKNGHVDG APHQTIYSAL
MIRSEDAGFV VITGVMSRRY
LCMDFRGNIF GSHYFDPENC RFQHQTLENG YDVYHSPQYH FLVSLGRAKR
AFLPGMNPPP YSQFLSRNE IPLIHNTPI PRRHTRSAED 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 μ g/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 μ g/ml in the presence of 5 μ g/ml of Recombinant Mouse Klotho and 10 μ g/ml of heparin.

Technical Assistance:

At BioPioneer, we are committed to providing top-notch technical support and ensuring its accessibility. For any technical assistance, please email us at info@biopioneer.in.