

# Recombinant Human FGF23

Cat No:HR2R1409

For research use only

## Overview

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| Quantity           | 1.0 ?g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene Symbol        | FGF23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene ID            | 8074                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Accession          | Q9GZV9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Alternative Name   | FGF-23, Phosphatonin, Tumor-derived hypophosphatemia-inducing factor, HYPF<br/>Recombinant Human Fibroblast Growth Factor 23 (FGF23)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Species            | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Source             | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Description        | FGF-23 is a protein of ?30 kDa that is proteolytically processed to generate smaller N-terminal (18 kDa) and C-terminal (12 kDa) fragments. The N-terminal fragment of FGF-23 contains the FGF receptor (FGFR)-binding domain. In vivo studies using synthetic peptides have indicated that neither of the processed N-terminal or C-terminal fragments of FGF-23 can influence serum phosphate levels. FGF-23 can decrease the activity of NaPi-2a and NaPi-2c cotransporters to reduce renal phosphate reabsorption and thereby can increase urinary phosphate excretion. Similarly, FGF-23 can suppress the expression of 1-alpha-hydroxylase to reduce the production of the active vitamin D metabolite 1,25(OH)2D. Moreover, FGF-23 can also induce 24- hydroxylase, which degrades 1,25(OH)2D |
| Functions          | The ED(50) was determined by the dose-dependent proliferation of mouse 3T3 cells expressing FGF receptors, and was found to be < 0.3 ug/mL, corresponding to a specific activity of 3.0 x 10^4 units/mg.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Formulation        | Recombinant Human FGF23 was lyophilized from 0.2 ?m filtered PBS solution, pH 7.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Solubility         | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Appearance         | Lyophilized Powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Molecular Weight   | 23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Purity             | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Concentration      | <1.0 EU/?g of recombinant protein as determined by the LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Shipping Condition | Ambient Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Storage Condition  | The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |