

Growth Factor Data Sheet

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FGF23 is a member of the Fibroblast Growth Factor family of proteins. In the FGF family, FGF23 is most closely associated with FGF15/19 and FGF21 (see additional information). FGF23 shares 71% homology with mouse Fgf23 at the amino acid level. FGF23 is produced by osteocytes and osteoblasts in response to high circulating phosphate levels, elevated parathyroid hormone, and circulatory volume loading. It functions as an endocrine phosphatonin by suppressing circulating phosphate levels. FGF23 interaction with renal proximal tubular epithelium decreases the renal resorption of phosphate by down regulating phosphate transporters and by suppressing vitamin D production. It also decreases the intestinal absorption of phosphate.

Catalog Number	1140-23
Product Name	FGF23, Human Recombinant Human Fibroblast Growth Factor 23 FGF-23
Source	<i>Escherichia coli</i>
MW	~25.3 kDa (227 amino acid)
Sequence	YPNASPLLGS SWGGLIHLYT ATARNSYHLQ IHKNGHVDGA PHQTIYSALM IRSEDAGFVV ITGVMSRRYL CMDFRGNIFG SHYFDPENCR FQHQTLENGY DVYHSPQYHF LVSLGRAKRA FLPGMNPPPY SQFLSRRNEI PLIHFNTPIP RRHTRSAEDD SERDPLNVLK PRARMTTAPA SCSQELPSAE DNSPMASDPL GVVRRGRVNT HAGGTGPEGC RPF AKFI
Accession Number	Q9GZV9
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 µg/ml, corresponding to a specific activity of >2.0 × 10 ³ IU/mg in the presence of 0.3 µg/ml of rMuKlotho and 10 µg/ml of heparin.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.