

ARG70129 Human FGF23 recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg
Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human FGF23 recombinant protein
Tested Application	SDS-PAGE
Target Name	FGF23
Species	Human
A.A. Sequence	Tyr25 - Ile251
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce proliferation in BaF3 cells transfected with human FGFR3c. The ED50 for this effect is < 0.3 µg/mL.
Alternate Names	ADHR; Phosphatonin; HPDR2; FGFN; Tumor-derived hypophosphatemia-inducing factor; PHPTC; FGF-23; Fibroblast growth factor 23; HYPF

Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	PBS (pH 8.0)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	FGF23
Gene Full Name	fibroblast growth factor 23
Background	This gene encodes a member of the fibroblast growth factor family of proteins, which possess broad mitogenic and cell survival activities and are involved in a variety of biological processes. The product of this gene regulates phosphate homeostasis and transport in the kidney. The full-length, functional protein may be deactivated via cleavage into N-terminal and C-terminal chains. Mutation of this cleavage site causes autosomal dominant hypophosphatemic rickets (ADHR). Mutations in this gene are also associated with hyperphosphatemic familial tumoral calcinosis (HFTC). [provided by RefSeq, Feb 2013]
Function	Regulator of phosphate homeostasis. Inhibits renal tubular phosphate transport by reducing SLC34A1

levels. Upregulates EGR1 expression in the presence of KL (By similarity). Acts directly on the parathyroid to decrease PTH secretion (By similarity). Regulator of vitamin-D metabolism. Negatively regulates osteoblast differentiation and matrix mineralization. [UniProt]

PTM

Following secretion this protein is inactivated by cleavage into a N-terminal fragment and a C-terminal fragment. The processing is effected by proprotein convertases.

O-glycosylated by GALT3. Glycosylation is necessary for secretion; it blocks processing by proprotein convertases when the O-glycan is alpha 2,6-sialylated. Competition between proprotein convertase cleavage and block of cleavage by O-glycosylation determines the level of secreted active FGF23. [UniProt]

Cellular Localization

Secreted. Note=Secretion is dependent on O-glycosylation. [UniProt]

Images

