

Fibroblast Growth Factor 23 Active Protein | FGF23 active protein

Active Fibroblast Growth Factor 23 (FGF23)

CATALOG #
AAA150099

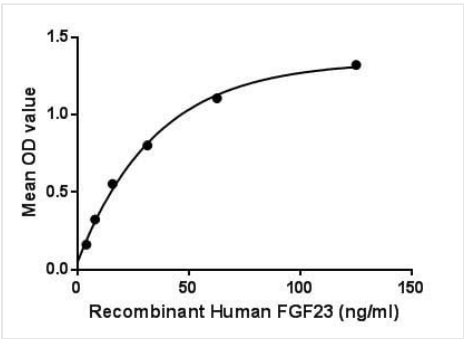
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Fibroblast Growth Factor 23; Active Fibroblast Growth Factor 23 (FGF23); ADHR; HYPF; HPDR2; PHPTC; Phosphatonin; Tumor-derived hypophosphatemia-inducing factor; FGF23 active protein

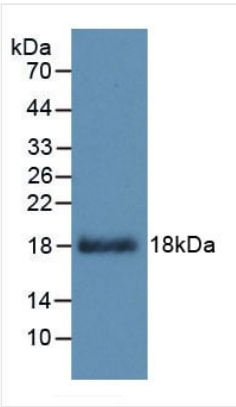
PRODUCT SPECIFICATIONS

Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Asp79~Arg160
Sequence Length	251
Applicable Applications for FGF23 active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Isoelectric Point	7.9
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

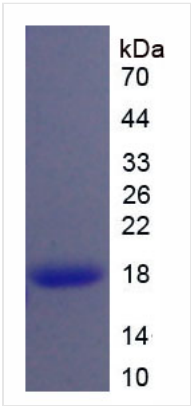


Bioactivity

Figure. The binding activity of FGF23 with FGFR2. Fibroblast growth factor 23 or FGF23 is a member of the fibroblast growth factor (FGF) family which is responsible for phosphate and vitamin D metabolism. The main function of FGF23 seems to be regulation of phosphate concentration in plasma. FGF23 decreases the reabsorption and increases excretion of phosphate and suppress 1-alpha-hydroxylase, reducing its ability to activate vitamin D and subsequently impairing calcium absorption. Besides, Fibroblast Growth Factor Receptor 2 (FGFR2) has been identified as an interactor of FGF23, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF23 and recombinant human FGFR2. Briefly, FGF23 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to FGFR2-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-FGF23 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of FGF23 and FGFR2 was shown in Figure 1, and this effect was in a dose dependent manner.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for FGF23 active protein	Cytokine; Tumor immunity; Infection immunity; Genetic science
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10190674
NCBI GeneID	8074
NCBI Accession #	NP_065689.1
NCBI GenBank Nucleotide #	NP_065689.1
UniProt Accession #	Q9GZV9

Molecular Weight	Predicted Molecular Mass: 10.8kDa Accurate Molecular Mass: 11kDa
NCBI Official Full Name	fibroblast growth factor 23
NCBI Official Synonym Full Names	fibroblast growth factor 23
NCBI Official Symbol	FGF23
NCBI Official Synonym Symbols	ADHR; FGFN; HYPF; HFTC2; HPDR2; PHPTC
NCBI Protein Information	fibroblast growth factor 23
UniProt Protein Name	Fibroblast growth factor 23
UniProt Gene Name	FGF23
UniProt Synonym Gene Names	HYPF; FGF-23
UniProt Entry Name	FGF23_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/fgf23-active-protein/fibroblast-growth-factor-23/150099>