Human FGF23 protein, His tag

Cat. No. GTX00257-pro

Applications	Functional Assay
Species	Human

Package
10 µg

Applications

Application Note

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 100 µl were then transferred to FGFR2-coated microtiter wells and incubated for 2h at 37ºC. 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 37ºC. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of FGF23 and FGFR2 was in a dose dependent manner.

Observed MW (kDa)	11 kDa.

Properties

Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4ºC. For long-term storage, store at -20ºC or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag; Asp79~Arg160 (NP_065689.1)
Expression System	E. coli
Purity	> 95%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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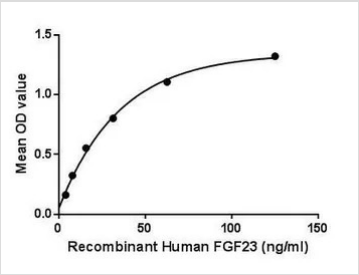
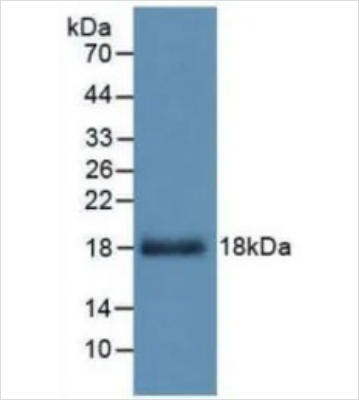
DATA IMAGES



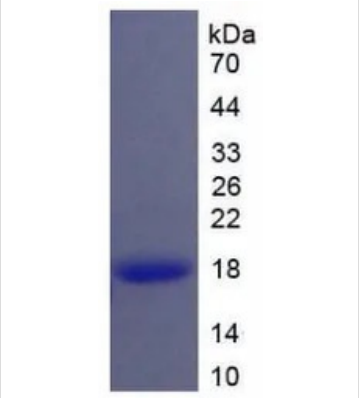
GTX00257-pro Functional Assay Image

Functional ELISA analysis of GTX00257-pro Human FGF23 protein which can bind immobilized FGFR2 protein.



GTX00257-pro Image

WB analysis of GTX00257-pro Human FGF23 protein.



GTX00257-pro Image

SDS-PAGE analysis of GTX00257-pro Human FGF23 protein.

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