abcam

Product datasheet

Recombinant Human FGF 23 protein ab104163

1 Image

Overview

Product name	Recombinant Human FGF 23 protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	Escherichia coli

Amino Acid Sequence

Accession	Q9GZV9
Species	Human
Sequence	**MKHHHHHHA**SAEDDSERDPLNVLKPRARMTPAPASCSQELPSAEDNSPMA SDPLGVVRGGRVNTHAGGTGPEGCRPFAKFI
Molecular weight	9 kDa including tags
Amino acids	180 to 251
Tags	His tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of **ab104163** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Western blot
Form	Lyophilised
Additional notes	Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Preparation and Storage

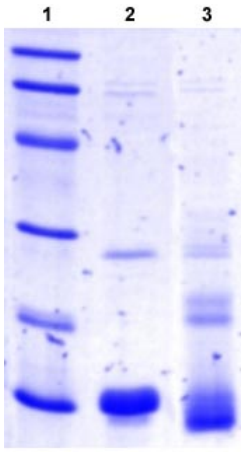
Stability and Storage	Shipped at 4°C. Store at -80°C. pH: 7.50

	Constituents: 0.242% Tris, 0.29% Sodium chloride
Reconstitution	Add deionized water to prepare a working stock solution of 0.5 mg/ml and let the lyophilized pellet dissolve completely. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

General Info

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.
Tissue specificity	Expressed in osteogenic cells particularly during phases of active bone remodeling. In adult trabecular bone, expressed in osteocytes and flattened bone-lining cells (inactive osteoblasts).
Involvement in disease	Defects in FGF23 are the cause of autosomal dominant hypophosphataemic rickets (ADHR) [MIM:193100]. ADHR is characterized by low serum phosphorus concentrations, rickets, osteomalacia, leg deformities, short stature, bone pain and dental abscesses. Defects in FGF23 are a cause of hyperphosphatemic familial tumoral calcinosis (HFTC) [MIM:211900]. HFTC is a severe autosomal recessive metabolic disorder that manifests with hyperphosphatemia and massive calcium deposits in the skin and subcutaneous tissues.
Sequence similarities	Belongs to the heparin-binding growth factors family.
Post-translational modifications	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.
Cellular localization	Secreted. Secretion is dependent on O-glycosylation.

Images



SDS-PAGE - Recombinant Human FGF 23 protein (ab104163)

14% SDS-PAGE:
Lane 1: M.W. marker – 14, 21, 31, 45, 66, 97 kDa
Lane 2: Reduced and boiled sample, 5µg/lane.
Lane 3: Non-reduced and non-boiled sample, 5µg/lane.

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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