abcam

Product datasheet

Recombinant human FGF 23 protein ab108553

画像数 1

製品の概要

製品名	Recombinant human FGF 23 protein
タンパク質長	Full length protein

製品の詳細

由来	Recombinant
由来	HEK 293 cells
アミノ酸配列	
アクセッション番号	Q9GZV9
生物種	Human
分子量	60 kDa including tags
領域	1 to 251

特性

Our Abpromise guarantee covers the use of **ab108553** in the following tested applications.

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

生理活性	Activates ERK and FRS2alpha phosphorylation in Klotho expressing cells.
アプリケーション	Functional Studies SDS-PAGE
エンドトキシン・レベル	< 0.100 Eu/µg
精製度	> 90 % SDS-PAGE. ab108553 is 0.2µm filtered.
製品の状態	Liquid
備考	Working aliquots are stable for up to 3 months when stored at -20°C.

前処理および保存

保存方法および安定性	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Preservative: None

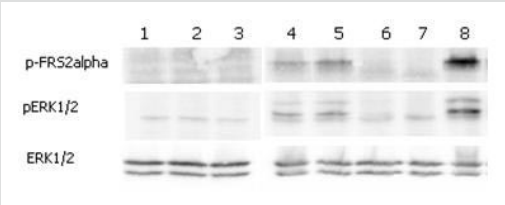
Constituents: PBS

This product is an active protein and may elicit a biological response in vivo, handle with caution.

関連情報

機能	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.
組織特異性	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).
関連疾患	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.
配列類似性	Belongs to the heparin-binding growth factors family.
翻訳後修飾	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.
細胞内局在	Secreted. Secretion is dependent on O-glycosylation.

画像



Functional Studies - FGF 23 protein (ab108553)

ERK and FRS2aplha phosphorylation induced by FGF 23 in Klotho expressing cells.
Klotho expressing HEK 293EBNA cells were serum starved for 16hr and then stimulated with hFGF 23-His, FGF 23-Fc (ab108553), mCD137-Fc (Fc control) and FGF-b (positive control) for 10 min, respectively.
Antibodies against pFRS2alpha, pERK1/2 & total ERK1/2 were used for immunoblotting.

Lane 1: Mock (non-treated)
Lane 2: Mock + hFGF 23-Fc (ab108553) 1µg/ml
Lane 3: Mock + hFGF 23-His 1µg/ml
Lane 4: Klotho + hFGF 23-Fc (ab108553) 1µg/ml
Lane 5: Klotho + hFGF 23-Fc (ab108553) 4µg/ml
Lane 6: Klotho + mCD137-Fc 1µg/ml
Lane 7: Klotho (non-treated)
Lane 8: Klotho + 100ng/ml FGF-b

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