

Recombinant human Klotho protein (Active) ab84072

6 References

製品の詳細

製品名	Recombinant human Klotho protein (Active)
生理活性	Determined by the dose-dependent stimulation of the proliferation of murine NIH/3T3 cells. ab84072 is effective in a concentration range of 0.5-2.0 µg/ml.
精製度	> 98 % SDS-PAGE. > 98% HPLC analyses.
エンドトキシン・レベル	< 1.000 Eu/µg
発現系	CHO cells
アクセッション番号	<u><b>Q9UEF7</b></u>
タンパク質長	Protein fragment
Animal free	No
由来	Recombinant
生物種	Human
配列	EPGDGAQTWA RFSRPPAPEA AGLFQGTFPD GFLWAVGSAA YQTEGGWQQH GKGASIWDTF THHPLAPPGD SRNASLPLGA PSPLQPATGD VASDSYNNVF RDTEALRELG VTHYRFSISW ARVLPNGSAG VPNREGLRYY RRLLELREL GVQPVVTLYH WDL PQRLQDA YGGWANRALA DHFRDYAELC FRHFGGQVKY WITIDNPYVV AWHGYATGRL APGIRGSPRL GYLVAHNLLL AHAKVWHLYN TSFRPTQGGQ VSIALSSHWI NPRRMTDHSI KECQKSLDFV LGWFAKPVFI DGDYPESMKN NLSSILPDFT ESEKKFIKGT ADFFALCFGP TLSFQLLDPH MKFRQLESPN LRQLLSWIDL EFNHPQIFIV ENGWFVSGTT KRDDAKYMY LKKFIMETLK AIKLDGVDVI GYTAWSLMDG FEWHRGYSIR RGLFYVDFLS QDKMLLPKSS ALFYQKLIEK NGFPPLPENQ PLEGTFPCDF AWGVVDNYIQ VSQLTKEISS LTKPYH
予測される分子量	59 kDa
領域	34 to 549

## 特性

Our **Abpromise guarantee** covers the use of **ab84072** in the following tested applications.

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

### アプリケーション

Functional Studies

SDS-PAGE

HPLC

### 製品の状態

Lyophilized

### 備考

Endotoxin level is less than 0.1 ng per µg (1EU/µg).

## 前処理および保存

### 保存方法および安定性

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

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

### 再構成

Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. Store at 2°C to 8°C for 1 week, or prepare for extended storage. Extended Storage: Follow reconstitution with further dilution in a buffer containing a carrier protein (example 0.1% BSA). Store working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

## 関連情報

### 機能

May have weak glycosidase activity towards glucuronylated steroids. However, it lacks essential active site Glu residues at positions 239 and 872, suggesting it may be inactive as a glycosidase in vivo. May be involved in the regulation of calcium and phosphorus homeostasis by inhibiting the synthesis of active vitamin D (By similarity). Essential factor for the specific interaction between FGF23 and FGFR1.

The Klotho peptide generated by cleavage of the membrane-bound isoform may be an anti-aging circulating hormone which would extend life span by inhibiting insulin/IGF 1 signaling.

### 組織特異性

Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid. Expressed in kidney, placenta, small intestine and prostate. Down-regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

### 関連疾患

Defects in KL are a cause of hyperphosphatemic familial tumoral calcinosis (HFTC) [MIM:211900]. A severe metabolic disorder that manifests with hyperphosphatemia and massive calcium deposits in the skin and subcutaneous tissues. Some patients manifest recurrent, transient, painful swellings of the long bones associated with the radiographic findings of periosteal reaction and cortical hyperostosis and absence of skin involvement.

### 配列類似性

Belongs to the glycosyl hydrolase 1 family. Klotho subfamily.

### ドメイン

Contains 2 glycosyl hydrolase 1 regions. However, the first region lacks the essential Glu active site residue at position 239, and the second one lacks the essential Glu active site residue at position 872.

### 翻訳後修飾

N-glycosylated.

### 細胞内局在

Secreted and Cell membrane. Isoform 1 shedding leads to a soluble peptide.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors