

### Anti-Klotho antibody [EPR6856] ab181373

リコンビナント **RabMAb**

★☆☆☆☆ **1 Abreviews** **30 References** 画像数 7

#### 製品の概要

製品名	Anti-Klotho antibody [EPR6856]
製品の詳細	Rabbit monoclonal [EPR6856] to Klotho
由来種	Rabbit
特異性	When we tested the antibody in human samples, the only form of the protein that we are able to detect is the secreted one (about 65kDa). When we tested the antibody in mouse samples (wt vs KO) we could only detect the membrane bound form of the protein (about 130kDa). This difference could be due to the nature of the samples (different species). However, we do not have a clear explanation about this. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented here.
アプリケーション	<b>適用あり:</b> IHC-P, WB <b>適用なし:</b> ICC/IF
種交差性	<b>交差種:</b> Mouse, Human
免疫原	Synthetic peptide within Human Klotho aa 400-500. The exact sequence is proprietary. Database link: <a href="#">Q9UEF7</a>
ポジティブ・コントロール	Human testis, fetal kidney and fetal thymus lysates; Human clear cell carcinoma kidney tissue, Human kidney tissue.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> . Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

#### 製品の特性

製品の状態 Liquid

保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR6856
アイソタイプ	IgG

## アプリケーション

**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab181373の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

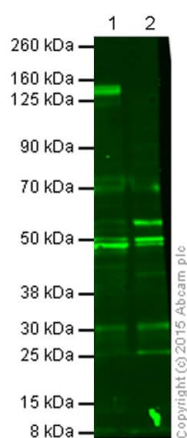
アプリケーション	Abreviews	特記事項
IHC-P	★ ★ ★ ★ ★ (1)	1/300. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. <b>For unpurified, use 1/100 - 1/250.</b>
WB		1/1000. Detects a band of approximately 62 kDa (predicted molecular weight: 62, 116 kDa).

**追加情報**      Is unsuitable for ICC/IF.

## ターゲット情報

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/IGF1 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.

## 画像



Western blot - Anti-Klotho antibody [EPR6856]  
(ab181373)

**All lanes :** Anti-Klotho antibody [EPR6856] (ab181373) at 5 µg/ml

**Lane 1 :** Wild Type (WT) Mouse Kidney Tissue Lysate

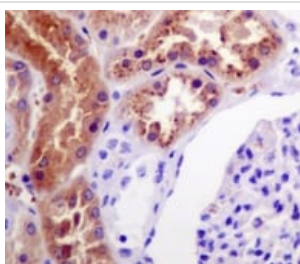
**Lane 2 :** Knock Out (KO) Mouse Kidney Tissue Lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 62, 116 kDa

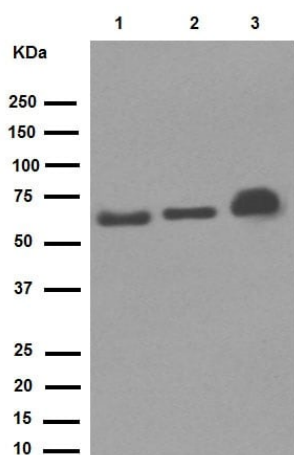
The blots were produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane were blocked for an hour before being incubated with *ab181373* (rabbit anti-Klotho antibody; diluted 5 ug/ml) for 24 hours at 4°C. Antibody binding was detected using infrared labelled goat anti-rabbit (green) antibody at 1:10,000 dilutions for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Klotho antibody  
[EPR6856] (ab181373)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Klotho with unpurified ab181373 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Klotho antibody [EPR6856]  
(ab181373)

**All lanes :** Anti-Klotho antibody [EPR6856] (ab181373) at 1/1000 dilution (purified)

**Lane 1 :** Human fetal kidney

**Lane 2 :** Human testis

**Lane 3 :** Human fetal thymus

Lysates/proteins at 20 µg per lane.

#### Secondary

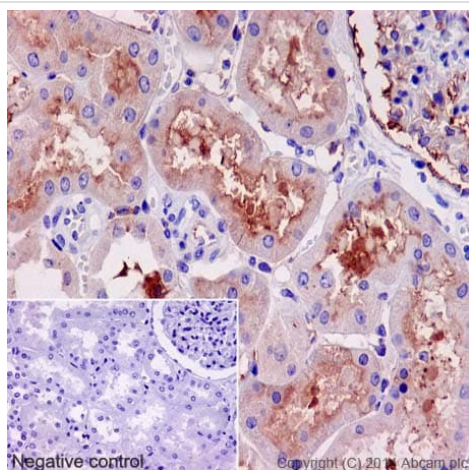
**All lanes :** HRP anti-rabbit IgG, specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 62, 116 kDa

**Observed band size:** 62 kDa

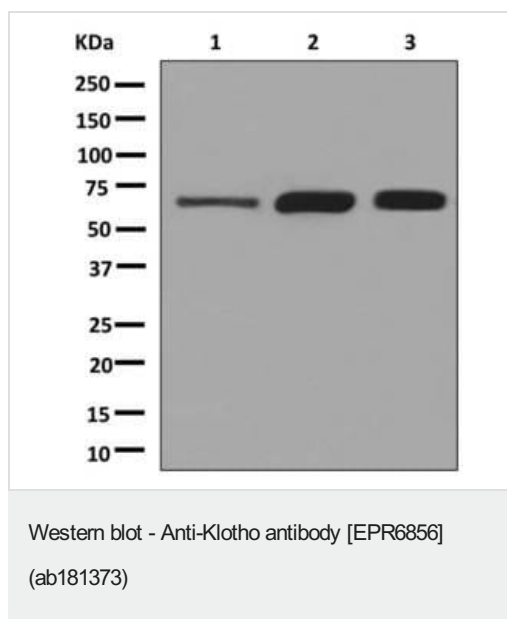
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Klotho antibody  
[EPR6856] (ab181373)

Immunohistochemical staining of paraffin embedded human kidney with purified ab181373 at a working dilution of 1 in 300. The secondary antibody used is a HRP polymer for rabbit IgG. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



**All lanes :** Anti-Klotho antibody [EPR6856] (ab181373) at 1/1000 dilution (unpurified)

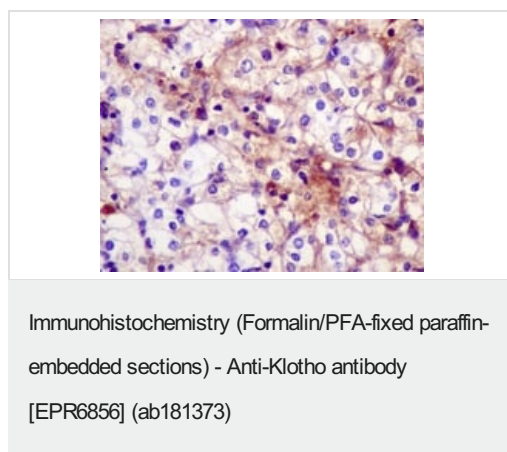
**Lane 1 :** Human fetal kidney lysates

**Lane 2 :** Human testis lysates

**Lane 3 :** Human fetal thymus lysates

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 62, 116 kDa



Immunohistochemical analysis of paraffin-embedded human kidney clear cell carcinoma tissue labeling Klotho with unpurified ab181373 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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**Success from the first experiment**  
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Anti-Klotho antibody [EPR6856] (ab181373)

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