



## Product datasheet

### Anti-Klotho antibody ab203576

★★★★★ [1 Abreviews](#) [20 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-Klotho antibody
<b>Description</b>	Rabbit polyclonal to Klotho
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat
<b>Immunogen</b>	Synthetic peptide within Human Klotho aa 400-500 conjugated to keyhole limpet haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <a href="#">contact</a> our Scientific Support team to discuss your requirements. Database link: <a href="#">Q9UEF7</a>
	<div>  <a href="#">Run BLAST with</a> </div> <div>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	Mouse and rat kidney tissue.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab203576 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/100 - 1/500. (or 1/50 - 1/200 using a fluorescent secondary antibody).

## Target

### Function

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.

### Tissue specificity

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.

### Involvement in disease

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.

### Sequence similarities

Belongs to the glycosyl hydrolase 1 family. Klotho subfamily.

### Domain

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.

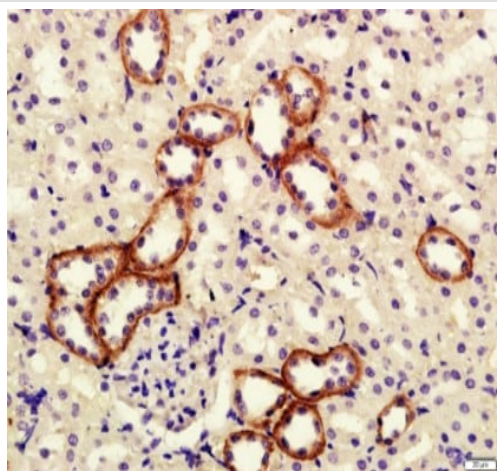
### Post-translational modifications

N-glycosylated.

### Cellular localization

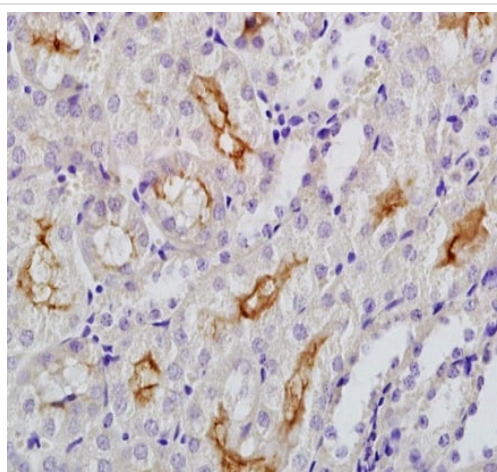
Secreted and Cell membrane. Isoform 1 shedding leads to a soluble peptide.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Klotho antibody (ab203576)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat kidney tissue labeling Klotho with ab203576 at 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Klotho antibody (ab203576)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse kidney tissue labeling Klotho with ab203576 at 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.

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