

Klotho Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF2470a

Specification

Klotho Antibody (internal region) - Product Information

Application	IHC
Primary Accession	O9UEF7
Other Accession	NP_004786.2 , NP_710150.1 , 9365
Reactivity	Human
Predicted	Mouse, Rat
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	116181

Klotho Antibody (internal region) - Additional Information

Gene ID 9365

Other Names

Klotho, 3.2.1.31, Klotho peptide, KL

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Klotho Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Klotho Antibody (internal region) - Protein Information

Name KL

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 (By similarity).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:O35082}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:O35082}. Note=Isoform 1 shedding leads to a soluble peptide. {ECO:0000250|UniProtKB:O35082} [Klotho peptide]: Secreted {ECO:0000250|UniProtKB:O35082}

Tissue Location

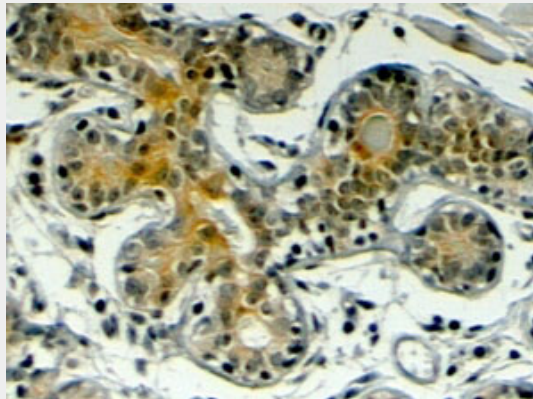
Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid Expressed in kidney, placenta, small intestine and prostate. Down-regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

Klotho Antibody (internal region) - Protocols

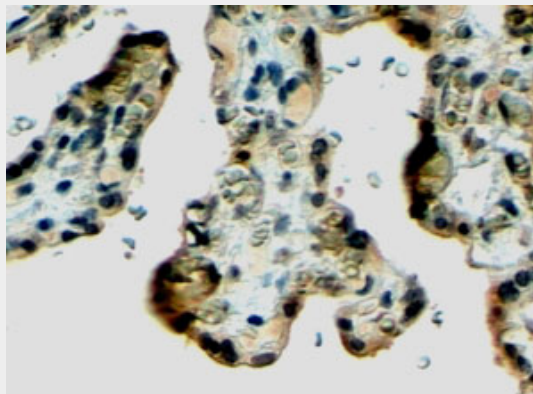
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Klotho Antibody (internal region) - Images



AF2470a (4 µg/ml) staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.



AF2470a (4 µg/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

Klotho Antibody (internal region) - Background

This antibody is expected to recognise both reported isoforms (NP_004786.2; NP_710150.1).

Klotho Antibody (internal region) - References

Suppression of ageing in mice by the hormone Klotho. Kurosu H, Yamamoto M, Clark JD, Pastor JV, Nandi A, Gurnani P, McGuinness OP, Chikuda H, Yamaguchi M, Kawaguchi H, Shimomura I, Takayama Y, Herz J, Kahn CR, Rosenblatt KP, Kuro-o M. Science. 2005 Sep 16;309(5742):1829-33. Epub 2005 Aug 25. PMID: 16123266