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Klotho Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2945b

Specification

Klotho Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	Q9UEF7
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**986-1012**

Klotho Antibody (C-term) - Additional Information

Gene ID 9365

Other Names
Klotho, Klotho peptide, KL

Target/Specificity
This Klotho antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 986-1012 amino acids from the C-terminal region of human Klotho.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
Klotho Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Klotho Antibody (C-term) - 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}

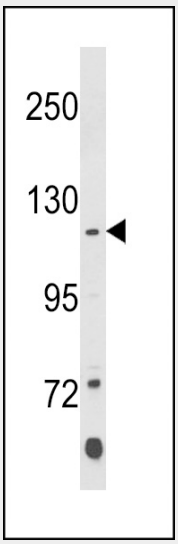
Tissue Location
Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid Expressed in kidney, placenta, small intestine and prostate. Down- regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

Klotho Antibody (C-term) - Protocols

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

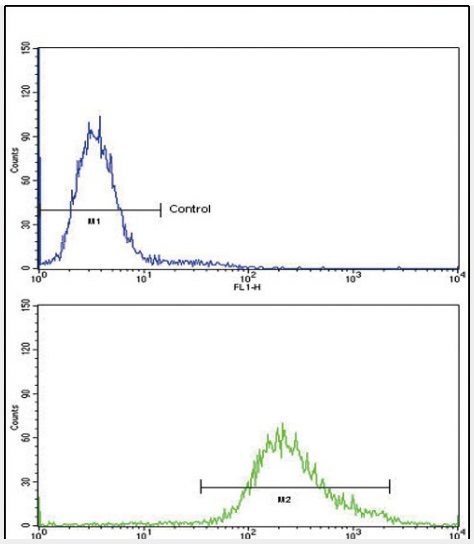
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Klotho Antibody (C-term) - Images



Western blot analysis of Klotho Antibody (C-term) (Cat. #AP2945b) in K562 cell line lysates (35ug/lane). Klotho (arrow) was detected using the purified Pab.

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Flow cytometric analysis of K562 cells using Klotho Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Klotho Antibody (C-term) - Background

Klotho is a type-I membrane protein that is related to beta-glucosidases. Reduced production of this protein has been observed in patients with chronic renal failure (CRF), and this may be one of the factors underlying the degenerative processes (e.g., arteriosclerosis, osteoporosis, and skin atrophy) seen in CRF. Also, mutations within this protein have been associated with ageing and bone loss.

Klotho Antibody (C-term) - References

Sugiyama,N., et.al., Mol. Cell Proteomics 6 (6), 1103-1109 (2007)

Klotho Antibody (C-term) - Citations

- Decrease of Klotho in the kidney of streptozotocin-induced diabetic rats.