

Klotho Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2945b

Product Information

Application	WB, FC, E
Primary Accession	Q9UEF7
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	116181
Antigen Region	986-1012

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 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

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.

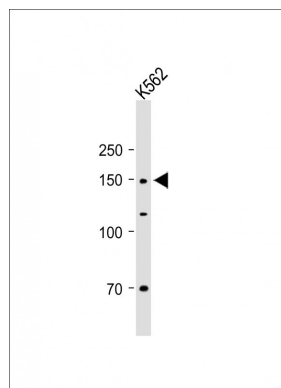
Background

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.

References

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

Images



All lanes : Anti-Klotho Antibody (C-term) at 1:1000 dilution
Lane 1: K562 whole cell lysate Lane 2: Mouse brain lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 70kDa
Blocking/Dilution buffer: 5% NFDm/TBST.

Citations

- [Decrease of Klotho in the kidney of streptozotocin-induced diabetic rats.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.