

Klotho Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2945b**Specification**

Klotho Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9UEF7](#)**Klotho Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 9365**Other Names**

Klotho, Klotho peptide, KL

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2945b](/products/AP2945b) was selected from the C-term region of human Klotho. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Klotho Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Klotho Antibody (C-term) Blocking Peptide - Images**Klotho Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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