

Klotho Blocking Peptide (C-term)

Synthetic peptide Catalog # BP22140b

Specification

Klotho Blocking Peptide (C-term) - Product Information

Primary Accession Q9UEF7 Other Accession

<u> 08WP17</u>

Klotho Blocking Peptide (C-term) - Additional Information

Gene ID 9365

Other Names Klotho, 3.2.1.31, Klotho peptide, KL

Target/Specificity

The synthetic peptide sequence is selected from aa 304-315 of HUMAN KL

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 Blocking Peptide (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

Klotho Blocking Peptide (C-term) -Background

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).

Klotho Blocking Peptide (C-term) -References

Kuro-o M., et al. Nature 390:45-51(1997). Matsumura Y., et al. Biochem. Biophys. Res. Commun. 242:626-630(1998). Dunham A., et al. Nature 428:522-528(2004). Kato Y., et al. Biochem. Biophys. Res. Commun. 267:597-602(2000). Yahata K., et al.J. Mol. Med. 78:389-394(2000).



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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 Blocking Peptide (C-term) -Protocols

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

Blocking Peptides