

## KL / Klotho Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS14737

### **Specification**

## KL / Klotho Antibody (Internal) - Product Information

Application IF, WB, IHC
Primary Accession Q9UEF7
Reactivity Human, Mouse, Rat
Host Rabbit
Clonality Polyclonal

# KL / Klotho Antibody (Internal) - Additional Information

#### **Gene ID 9365**

Calculated MW

#### **Other Names**

Klotho, 3.2.1.31, Klotho peptide, KL

## Target/Specificity

Human KL / Klotho. Three isoforms of KLOTHO are known to exist.

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

116kDa KDa

#### **Precautions**

KL / Klotho Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## KL / Klotho Antibody (Internal) - 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.

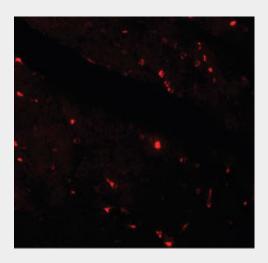
**Volume** 50 μl

# KL / Klotho Antibody (Internal) - Protocols

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

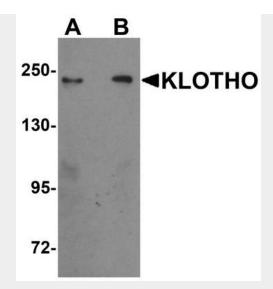
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# KL / Klotho Antibody (Internal) - Images

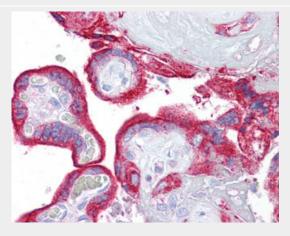


Immunofluorescence of KLOTHO in mouse heart tissue with KLOTHO antibody at 20 ug/ml.





Western blot analysis of KLOTHO in rat heart tissue lysate with KLOTHO antibody at (A) 1 and (B)...



Anti-Klotho antibody IHC of human placenta.

# KL / Klotho Antibody (Internal) - Background

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# KL / Klotho Antibody (Internal) - 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).