

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
Calculated MW	116kDa KDa

KL / Klotho Antibody (Internal) - Additional Information**Gene ID** 9365**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.

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.

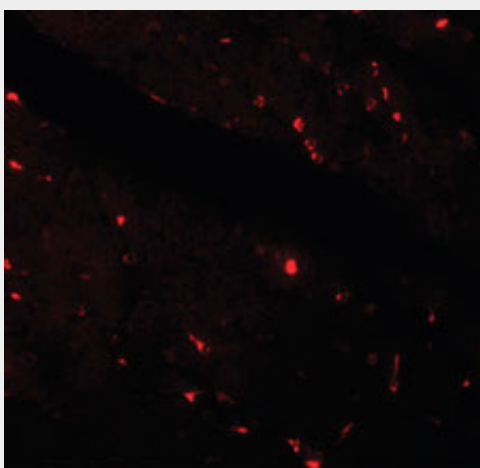
Volume
50 µl

KL / Klotho Antibody (Internal) - Protocols

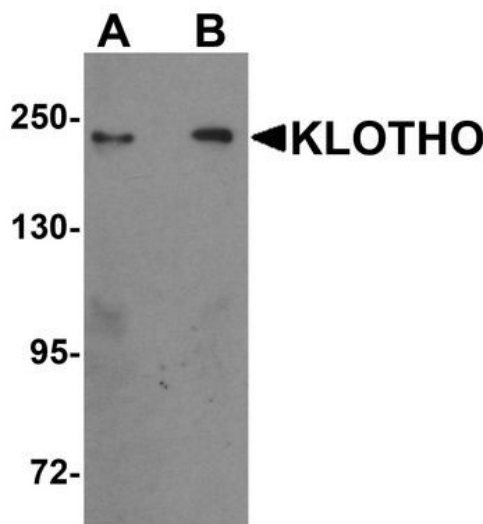
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

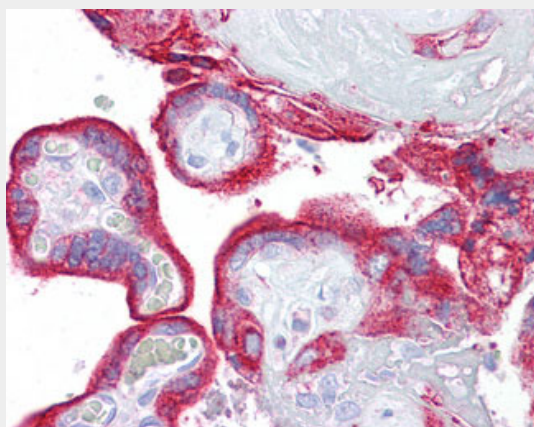
KL / Klotho Antibody (Internal) - Images



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

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).

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).