

KL Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22273c**Specification**

KL Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	Q9UEF7
Other Accession	Q8WP17
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	116181

KL Antibody (Center) - Additional Information**Gene ID** 9365**Other Names**

Klotho, 3.2.1.31, Klotho peptide, KL

Target/Specificity

This KL antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 331-365 amino acids from the Central region of human KL.

Dilution

WB~~1:2000

FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

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

KL Antibody (Center) - 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

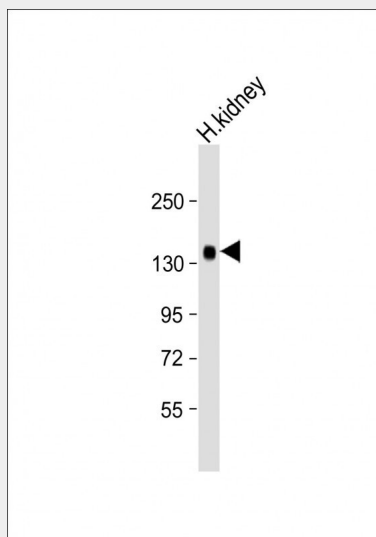
Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid Expressed in kidney, placenta, small intestine and prostate. Down- regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

KL Antibody (Center) - Protocols

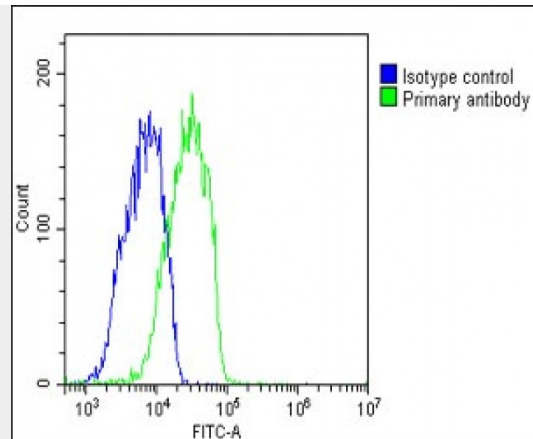
Provided below are standard protocols that you may find useful for product applications.

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

KL Antibody (Center) - Images



Anti-KL Antibody (Center) at 1:2000 dilution + Human kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 116 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HepG2 cells stained with AP22273c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22273c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

KL Antibody (Center) - 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 Antibody (Center) - 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).