

KL Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22274c

Specification

KL Antibody (Center) - Product Information

Application WB,E
Primary Accession Q9UEF7

Other Accession <u>Q8WP17</u>, <u>Q35082</u>

Reactivity Human

Predicted Monkey, Mouse

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 402-436 amino acids from the Central region of human KL.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

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

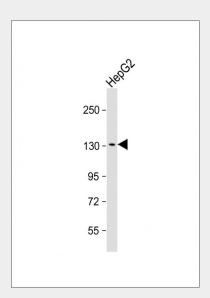
Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid Expressed in kidney, placenta, small intestine and prostate. Down- regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

KL Antibody (Center) - Protocols

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

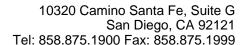
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KL Antibody (Center) - Images



Anti-KL Antibody (Center) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 μ g 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.

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).