

**KL Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22274c**

**Specification**

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**KL Antibody (Center) - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB,E  |
| Primary Accession | <a href="#">O9UEF7</a>                          |
| Other Accession   | <a href="#">O8WP17</a> , <a href="#">O35082</a> |
| 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

**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

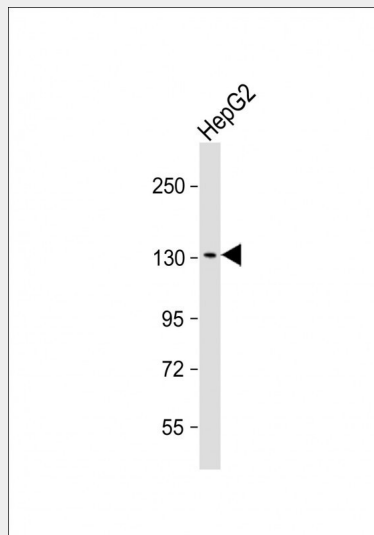
Present in cortical renal tubules (at protein level). Soluble peptide is present in serum and cerebrospinal fluid Expressed in kidney, placenta, small intestine and prostate. Down-regulated in renal cell carcinomas, hepatocellular carcinomas, and in chronic renal failure kidney.

### 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 + HepG2 whole cell 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.

### KL Antibody (Center) - Background

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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).