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# KL Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22274c

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9UEF7 |
| **Other Accession** | Q8WP17, O35082 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Mouse |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB57995 |
| **Calculated MW** | 116181 |

## Additional Information

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| **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. |

## Protein Information

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| **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 |

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| | 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. |

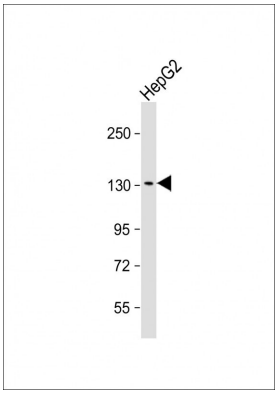
## Background

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).

## 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).


## 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.