

KL Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22274c

Product Information

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

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

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.

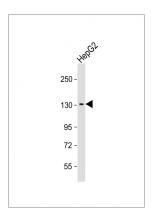
Background

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.