10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Klotho Antibody

Rabbit mAb
Catalog # AP91604

Product Information

Application	WB, IHC
Primary Accession	Q9UEF7
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	Kl; Klotho peptide;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	116181

Additional Information

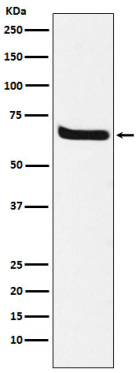
Dilution	WB 1:500~1:1000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Klotho
Description	May have weak glycosidase activity towards glucuronylated steroids. However, it lacks essential active site Glu residues at positions 239 and 872, suggesting 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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	KL
Function	Exhibits beta-glucuronidase activity in vitro despite lacking canonical catalytic Glu residues of glycosyl hydrolase 1 family enzymes (By similarity). Hydrolyzes steroid beta-D-glucuronides including estradiol-3-beta-D-glucuronide, estrone-3-beta-D-glucuronide and estriol-3-beta-D-glucuronide (By similarity). Essential for the interaction between FGF23 and FGFR1 and for FGF23-mediated regulation of renal vitamin D and phosphate homeostasis (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.

Images



Western blot analysis of Klotho expression in human fetal kidney lysate.

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