



# Mouse $\alpha$ -Klotho Assay Kit

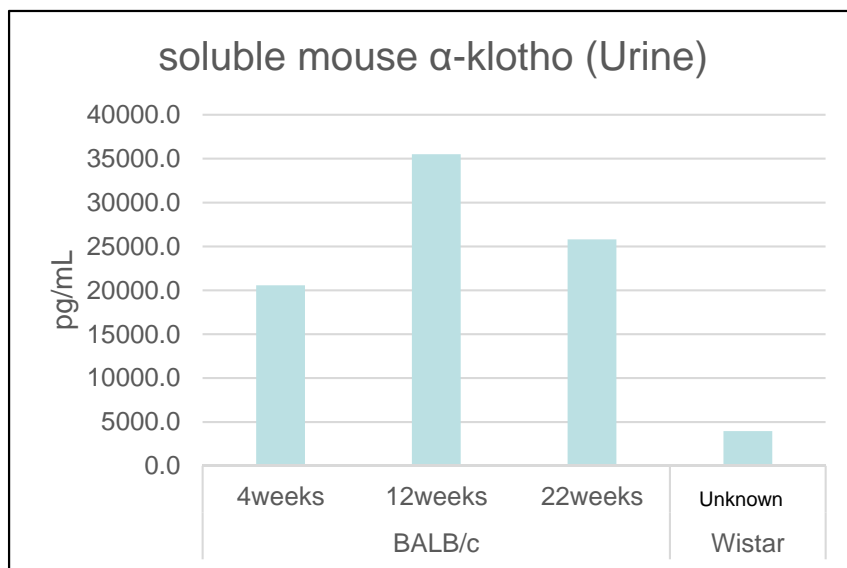
## Bio-marker for Kidney Protection

- Research Use Only -

" $\alpha$ -klotho" was identified as an extremely down-regulated gene in the genetically-modified mouse of which phenotype is very similar to various symptoms of human aging. Then, the sequences of  $\alpha$ -klotho genes have been identified in various species including humans based on the one of mouse.  $\alpha$ -Klotho protein is a 130 kDa, one-transmembrane protein and its expression is confirmed in the kidneys and the parathyroid glands. In recent years, it has become clear that  $\alpha$ -Klotho is an important molecule within a living organism regulating the metabolism of mineral such as calcium and phosphorus. Therefore, it is considered that, in  $\alpha$ -klotho mouse, early aging-like symptoms are induced by impaired mineral homeostasis caused by decreased expression of  $\alpha$ -Klotho.

Product Code	Produce Name	Size	Measurement Range	Sample Types	Measuring Sample			
					Serum	EDTA-plasma	Cell culture supernatant	Urine
27601	Mouse soluble $\alpha$ -Klotho Assay Kit - IBL	96 well	78.13 ~ 5000 pg/mL	M	-	-	-	○
27998	Human soluble $\alpha$ -Klotho Assay Kit - IBL	96 well	93.75 ~ 6,000 pg/mL	H	○	○	○	○

H: Human M: Mouse



(Experiment Example)  
BALB/C Mouse  
N=7, Urine sample  
Weekly age 4, 12, 22 weeks

### Reference

1: Yamazaki Y, Imura A, Urakawa I, Shimada T, Murakami J, Aono Y, Hasegawa H, Yamashita T, Nakatani K, Saito Y, Okamoto N, Kurumatani N, Namba N, Kitaoka T, Ozono K, Sakai T, Hataya H, Ichikawa S, Imel EA, Econs MJ, Nabeshima Y. Establishment of sandwich ELISA for soluble alpha-Klotho measurement: Age-dependent change of soluble alpha-Klotho levels in healthy subjects. *Biochem Biophys Res Commun.* 2010 Jul 30;398(3):513-8.

Distributed by



Distributed By:  
**IBL-America, Inc.**  
8201 Central Ave NE, Suite P  
Minneapolis, MN 55432, USA  
[info@ibl-america.com](mailto:info@ibl-america.com)  
(888) 523 1246