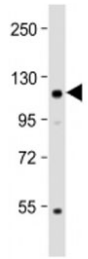
Klotho Antibody (F54138)

Catalog No.	Formulation	Size
F54138-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54138-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Predicted Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q9UEF7
Applications	WB: 1:2000
Limitations	This Klotho antibody is available for research use only.



Western blot testing of Kloto antibody at 1:2000 + mouse brain lysate. Predicted molecular weight ~116 kDa, observed at 120-135 kDa.

Description

Alpha-Klotho is a membrane protein encoded by the KL gene and is best known for its role in the regulation of phosphate and vitamin D metabolism. The protein is expressed prominently in the kidney and in selected additional tissues. Structurally, Klotho consists of a large extracellular region containing KL1 and KL2 domains, a single transmembrane segment and a short cytoplasmic tail.

Klotho is an essential component of the endocrine FGF23 signaling system. By forming complexes with selected fibroblast growth factor receptors, membrane-associated Klotho enables cells to respond efficiently to circulating FGF23. This pathway regulates renal phosphate handling and vitamin D metabolism and contributes to communication between bone and kidney in the maintenance of systemic mineral balance.

The extracellular portion of Klotho can also be released from the cell surface through proteolytic processing. Circulating and soluble forms of the protein have been investigated for biological activities extending beyond classical FGF23 signaling. Research has associated Klotho with processes involving ion transport, cellular stress responses and tissue homeostasis, while altered KL expression has been studied extensively in kidney disease and age-associated physiology.

This polyclonal antibody was generated against recombinant human Klotho protein. Although the immunogen is of human origin, the reagent has also demonstrated recognition of Klotho in mouse tissue. NSJ Bioreagents provides this reagent for research into KL expression, kidney biology, mineral metabolism and related physiological processes.

For additional information on Klotho biology and tissue-based validation, visit our Klotho Antibody / KL Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Klotho antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Recombinant human Klotho was used as the immunogen for the Klotho antibody.

Storage

Aliquot the Klotho antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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