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Product Datasheet

Rat Klotho protein, His tag, Unconjugated GTX00378-PRO

Article Name	Rat Klotho protein, His tag, Unconjugated
Biozol Catalog Number	GTX00378-PRO
Supplier Catalog Number	GTX00378-pro
Alternative Catalog Number	GTX00378-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	83504
UniProt	Q9Z2Y9
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Leu517~Leu956 (NP_112626.1)

Application Notes

Klotho (KL) is a transmembrane protein that, in addition to other effects, provides some control over the sensitivity of the organism to insulin and appears to be involved in aging. The Klotho protein is a novel beta-glucuronidase capable of hydrolyzing steroid beta-glucuronides. Genetic variants in KLOTHO have been associated with human aging, and Klotho protein has been shown to be a circulating factor detectable in serum that declines with age. The binding of certain fibroblast growth factors (FGFs) viz., FGF19, FGF20, and FGF23, to their fibroblast growth factor receptors, is promoted via their interactions as co-receptors with beta-Klotho. Besides, Fibroblast Growth Factor 23 (FGF23) has been identified as an interactor of KL, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat KL and recombinant rat FGF23. Briefly, KL were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to FGF23-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-KL pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of KL and FGF23 was in a dose dependent manner.