

Product datasheet for RC224132

Klotho (KL) (NM_004795) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klotho (KL) (NM_004795) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Klotho
Synonyms:	HFTC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224132 representing NM_004795 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGCCAGCGCCCGCCGCGCCCGCCGCGCCCGCCGCGCCCGCTCGCTGTCGCTGCTGCTGGTGTCTGC
TGGGCCTGGGCGCCCGCCGCTGCGTGCGGAGCCGGGCGACGGCGCGCAGACCTGGGCCGTTTCTCGCG
GCCTCTGCCCGGAGCCGCGGCTCTTCCAGGGCACCTTCCCGACGGCTTCTCTGGGCCGTGGGC
AGCGCCGCTACCAGACCGAGGGCGGCTGGCAGCAGCACGGCAAGGGTGGTCCATCTGGGATACGTTCA
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GCAGCCCGCCACCGGGGACGTAGCCAGCGACAGCTACAACAACGCTTCCGCGACACGGAGCGCTGCGC
GAGCTCGGGGTCCTCACTACCGCTTCTCCATCTCGTGGGCGCGAGTGTCCCAATGGCAGCGCGGGCG
TCCCAACCGCGAGGGGCTGCGCTACTACCGCGCCTGTGGAGCGGCTGCGGGAGCTGGGCGTGCAGCC
CGTGGTACCCTGTACCACTGGGACCTGCCAGCGCCTGCAGGACGCCCTACGGCGGCTGGGCCAACCGC
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CCTTGAGTTTTCACTTTTGGACCCTCACATGAAGTTCGCCAATTGGAATCTCCCAACCTGAGGCAACT
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AAGTCTTCAGCCTTGTCTACCAAAAGCTGATAGAGAAAAATGGCTTCCCTCCTTTACCTGAAAATCAGC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC224132 representing NM_004795
 Red=Cloning site Green=Tags(s)

MPASAPRRRPRPPPSL SLLLVL LGLGRRRLRAEPDGAQTWARFSRPPAPEAAGL FQGTFFDGF L WAVG
 SAAYQTEGGWQQHGKASIWDTFTHPLAPPGDSRNASLPLGAPSPLQPATGDVSDSYNNVFRDTEALR
 ELGVTHYRFSISWARVLPNGSAGVFNREGLRYYRLLERLRELGVQPVVTLYHWDLPQRLQDAYGGWANR
 ALADHFRDYAELCFRHHGGQVYWIITIDNPYVVAWHGYATGRLAPGIRGSPRLGYLVAHNLLLAHAKVWH
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 GTTKRDDAKYMYLKKFIMETLKAIKLDGVDVIGYTAWSLMDGFEWHRGYSIRRGLFYVDFLSQDKMLLP
 KSSALFYQKLEKNGFPPLPENQPLEGTFPCDFAWGVVDNYIQVDTTLSQFTDLNVYLWDVHHSKRLIKV
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 ITPVVALWQPMAPNQGLPRLARQGAWENPYTALFAEYARL CFQELGHHVKLWITMNEPYTRNMTYSAG
 HNLLKAHALAWHYNEKFRHAQNGKISIALQADWIEPACPF SQDKKEVAERVLEFDIGWLAEPIFGSDY
 PWVMRDWLNQRNFFLPYFTEDEKLIQGTDFLALSHYTTILVDSEKEDPIKYNDYLEVQEMTDITWLN
 SPSQVAVVPWGLRKVLNWLKFKYGDLPYIISNGIDDGLHAEDDQLRVVYMQNYINEALKAHILDGINLC
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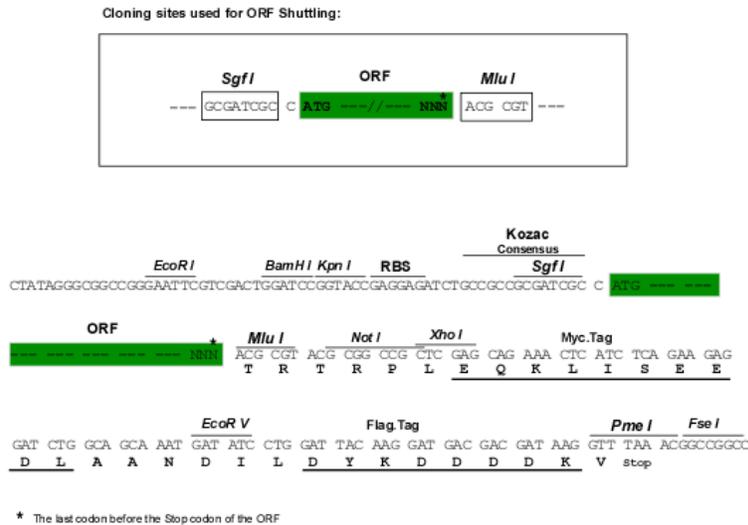
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2722_f01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004795

ORF Size: 3036 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004795.2](#), [NP_004786.2](#)

RefSeq Size: 5003 bp

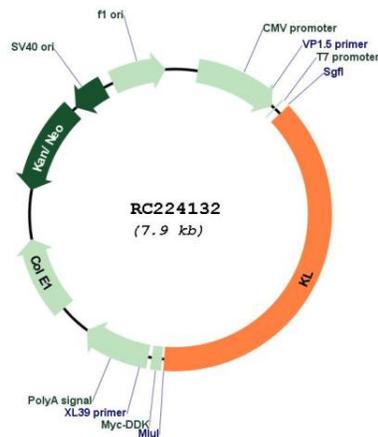
RefSeq ORF: 3039 bp

Locus ID: 9365

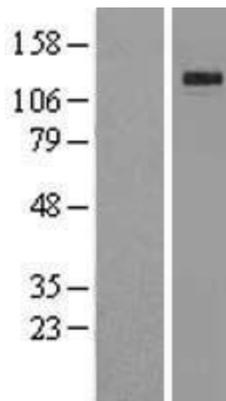
UniProt ID: [Q9UEF7](#)
Cytogenetics: 13q13.1
Protein Families: Secreted Protein, Transmembrane
MW: 116 kDa

Gene Summary: This gene encodes a type-I membrane protein that is related to beta-glucosidases. Reduced production of this protein has been observed in patients with chronic renal failure (CRF), and this may be one of the factors underlying the degenerative processes (e.g., arteriosclerosis, osteoporosis, and skin atrophy) seen in CRF. Also, mutations within this protein have been associated with ageing and bone loss. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC224132



Western blot validation of overexpression lysate (Cat# [LY417748]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224132 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).