

## Product datasheet for **SC303533**

### Klotho (KL) (NM\_004795) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Klotho (KL) (NM_004795) Human Untagged Clone
Tag:	Tag Free
Symbol:	Klotho
Synonyms:	HFTC3
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_004795 edited  
GAATTCGCATGCCCGCCAGCGCCCCGCGCCCGCCGCGCCCGCCGCGCCCGTCCGCTGT  
CGCTGCTGCTGGTGTGCTGCTGGCCTGGGGCGCCGCCCTGCGTGCGGAGCCGGGCGACG  
GCGCGCAGACCTGGGCCGTTTCTCGCGCCTCCTGCCCCGAGGCGCGGGCCTTTCC  
AGGGCACCTTCCCGACGGCTTCTCTGGGCCGTGGGCAGCGCCCTACCAGACCGAGG  
GCGGCTGGCAGCAGCACGGCAAGGTGCGTCCATCTGGGATACGTTACCCACCACCCCC  
TGGCACCCCCGGGAGACTCCCGAACGCCAGTCTGCCGTTGGGCGCCCCGTCGCCGCTG  
AGCCCCACCGGGGACGTAGCCAGCGACAGCTACAACAACGTTCTCCGCGACACGGAGG  
CGCTGCGCGAGCTCGGGTCACTACTACCGCTTCTCCATCTCGTGGGCGGAGTGTCC  
CCAATGGCAGCGGGCGTCCCCAACCGCGAGGGGCTGCGCTACTACCGCGCCTGCTGG  
AGCGGCTGCGGGAGCTGGGCGTGCAGCCGTTGGTACCCTGTACCACTGGGACCTGCCCC  
AGCGCCTGCAGGACGCTACGGCGGCTGGGCCAACCGCGCCTGGCCGACCACTTCAGGG  
ATTACGCGGAGCTCTGCTTCCGCCACTTCGGCGGTCAAGTCAAGTACTGGATCACCATCG  
ACAACCCCTACGTGGTGGCTGGCACGGCTACGCCACCGGGCGCCTGGCCCCGGCATCC  
GGGGCAGCCCGGGCTCGGGTACCTGGTGGCGACAACCTCCTCCTGGCTCATGCCAAAG  
TCTGGCATCTCTACAATACTTCTTTCCGTCCTCAGGGAGGTCAAGTGTCCATTGCC  
TAAGCTCTCACTGGATCAATCCTCGAAGAATGACCGACCACAGCATCAAAGAATGTCAA  
AATCTCTGGACTTTGTAAGTGGTTGGTTTGCCAAACCCGATTTTATTGATGGTACTATC  
CCGAGACATGAAGAATAACCTTTCATCTATTCTGCCTGATTTTACTGAATCTGAGAAAA  
AGTTCATCAAAGAACTGCTGACTTTTTGCTCTTTGCTTTGGACCCACCTTGAGTTTTT  
AACTTTTGGACCTCACATGAAGTTCGCCAATTGGAATCTCCCAACCTGAGGCAACTGC  
TTTCTGGATTGACCTTGAATTTAACCATCCTCAAATATTTATTGTGAAAAATGGCTGGT  
TTGTCTCAGGGACCACCAAGAGAGATGATGCCAAATATATGTATTACCTCAAAAAGTTCA  
TCATGAAACCTTAAAAGCCATCAAGCTGGATGGGGTGGATGTCATCGGGTATACCGCAT  
GGTCCCTCATGGATGGTTTCGAGTGGCACAGAGGTTACAGCATCAGGCGTGGACTTCT  
ATGTTGACTTTCTAAGCCAGGACAAGATGTTGTTGCCAAAGTCTTCAGCCTTGTCTACC  
AAAAGCTGATAGAAAAATGGCTTCCCTCCTTACCTGAAAATCAGCCCTAGAAGGGA



[View online >](#)

```

CATTTCCTGTGACTTTGCTTGGGGAGTTGTTGACAACACTACATTCAAGTAGATACCACTC
TGCTCAGTTTACCGACCTGAATGTTTACCTGTGGGATGTCCACCACAGTAAAAGGCTTA
TTAAAGTGGATGGGGTTGTGACCAAGAAGAGGAAATCCTACTGTGTTGACTTTGCTGCCA
TCCAGCCCCAGATCGCTTTACTCCAGGAAATGCACGTTACACATTTTCGTTCTCCCTGG
ACTGGGCCTGATTCTCCCTCTGGGTAACCAGTCCCAGGTGAACCAACCATCCTGCAGT
ACTATCGCTGCATGGCCAGCGAGCTTGTCCGTGTAACATCACCCAGTGGTGGCCCTGT
GGCAGCCTATGGCCCCGAACCAAGGACTGCCGCGCTCCTGGCCAGGCAGGGCGCCTGGG
AGAACCCTACACTGCCCTGGCCTTTCAGAGTATGCCCGACTGTGCTTCAAGAGCTCG
GCCATCACGTCAAGCTTTGGATAACGATGAATGAGCCGTATACAAGGAATATGACATACA
GTGCTGGCCACAACCTTCTGAAGGCCATGCCCTGGCTTGGCATGTGTACAATGAAAAGT
TTAGGCATGCTCAGAATGGGAAAATATCCATAGCCTTGCAGGCTGATTGGATAGAACCTG
CCTGCCCTTCTCCAAAAGGACAAAGAGGTGGCCGAGAGAGTTTTGGAATTTGACATTG
GCTGGCTGGCTGAGCCATTTTCGGCTCTGGAGATTATCCATGGGTGATGAGGGACTGGC
TGAACCAAGAAACAATTTTCTTCTTATTTCACTGAAGTAAAAAAGCTAATCC
AGGGTACCTTTGACTTTTTGGCTTTAAGCCATTATACCACCATCCTTGTAGACTCAGAAA
AAGAAGATCCAATAAAATACAATGATTACCTAGAAGTGAAGAAATGACCACATCACGT
GGCTCAACTCCCCAGTCAGGTGGCGGTAGTGCCTGGGGGTTGCGCAAAGTGTGAACT
GGCTGAAGTTCAAGTACGGAGACCTCCCATGTACATAATATCCAACGGAATCGATGACG
GGCTGCATGCTGAGGACGACCAGCTGAGGGTGTATTATATGCAGAATTACATAAACGAAG
CTCTCAAAGCCCACATACTGGATGGTATCAATCTTTGCGGATACTTTGCTTATTCGTTTA
ACGACCGCACAGCTCCGAGGTTTGGCCTCTATCGTTATGCTGCAGATCAGTTTGAGCCCA
AGGCATCCATGAAACATTACAGGAAAATTATTGACAGCAATGGTTTCCCGGGCCAGAAA
CTCTGGAAGATTTTGTCCAGAAGAATTACCGTGTGTACTGAGTGCAGTTTTTTTCCACA
CCCGAAAGTCTTTACTGGCTTTCATAGCTTTTCTATTTTTTGGCTTATTATTTCTCTCT
CCCTTATATTTTACTACTCGAAGAAAGGAGAAGAAGTTACAAATAGTTCTGAACATTTT
TCTATTATTCATTTTGAATAATTATGCAGACACATCAGCTGTTAACCATTTGCACCTC
TAAGTGTGTGAAACTGTAAATTCAT
    
```

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_004795

**OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:**

The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

**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

**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]

Transcript Variant: This variant (1) represents a shorter transcript, but encodes a longer, membrane bound isoform (a).