

Product datasheet for **SC306640**

Klotho (KL) (NM_153683) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klotho (KL) (NM_153683) Human Untagged Clone
Tag:	Tag Free
Symbol:	Klotho
Synonyms:	klotho; OTTHUMP00000018796
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene ORF sequence for NM_153683 edited
 CGCATGCCCGCCAGCGCCCCGCCGCGCCCGCCGCGCCCGCCCGCTCGCTGTGCTG
 CTGCTGGTGTGCTGGGCTGGGCGGCCGCCCTGCGTGCGGAGCCGGGCGACGGCGG
 CAGACCTGGGCCCGTTTCTCGGGCCTCCTGCCCCGAGGCCGCGGGCCTTCCAGGGC
 ACCTTCCCCGACGGCTTCTCTGGGCGTGGGAGCGCCGCTACCAGACCGAGGGCGG
 TGGCAGCAGCACGGCAAGGGTGCCTCACTGGGATACGTTCAACCACCACCCCTGGCA
 CCCCCGGGAGACTCCCGGAACGCCAGTCTGCCGTTGGGCGCCCGTCGCCGCTGCAGCC
 GCCACCGGGGACGTAGCCAGCGACAGCTACAACAACGTCTTCCGCGACACGGAGGCGCTG
 CGCGAGCTCGGGGTCACTCACTACCGCTTCTCCATCTCGTGGGCGGAGTGTCCCAAT
 GGCAGCGCGGGCTCCCCAACCGCGAGGGGCTGCGCTACTACCGCGCCTGCTGGAGCGG
 CTGCGGGAGTGGGCGTGACGCCGTGGTACCCTGTACCCTGGGACCTGCCACGCGC
 CTGCAGGACGCTACGGCGGCTGGGCCAACCGCGCCCTGGCCGACCACTTCAGGGATTAC
 GCGGAGCTCTGCTCCGCCACTTCGGCGGTCAAGTACTGGATCACCATCGACAAC
 CCCTACGTGGTGGCTGGCAGGCTACGCCACCGGGCGCTGGCCCCGGCATCCGGGGC
 AGCCCGGGCTCGGGTACCTGGTGGCGACAACCTCCTCTGGCTCATGCCAAAGTCTGG
 CATCTCTACAATACTTCTTCCGTCCTCAGGGAGGTCAAGGTGCCATTGCCCTAAGC
 TCTCACTGGATCAATCCTCGAAGAATGACCGACCACAGCATCAAAGAATGTCAAAAATCT
 CTGGACTTTGACTAGGTTGGTTTGCCAAACCCGATTTATTGATGGTACTATCCCGAG
 AGCATGAAGAATAACCTTTCATCTATTCTGCCTGATTTTACTGAATCTGAGAAAAAGTTC
 ATCAAAGAACTGCTGACTTTTTGCTCTTTGCTTTGGACCCACCTTGAGTTTTCAACTT
 TTGGACCTCACATGAAGTTCGCCAATTGGAATCTCCAACCTGAGGCAACTGCTTTCC
 TGGATTGACCTTGAATTTAACCATCCTCAAATATTTATTGTGAAAAATGGCTGGTTTGT
 TCAGGGACCAAGAGAGATGATGCCAAATATATGTATTACCTCAAAAAGTTCATCATG
 GAAACCTTAAAAGCCATCAAGCTGGATGGGGTGGATGTCATCGGGTATACCGCATGGTCC
 CTCATGGATGGTTTCGAGTGGCACAGAGTTACAGCATCAGGCGTGGACTCTTCTATGTT
 GACTTTCTAAGCCAGGACAAGATGTTGTTGCCAAAGTCTTCAGCCTTGTCTACCAAAAG
 CTGATAGAGAAAAATGGCTTCCCTCCTTACCTGAAAATCAGCCCTAGAAGGGACATTT
 CCCTGTGACTTTGCTTGGGGAGTTGTTGACAACTACATTCAGTAAGTCAAGTCAAGTCA
 CCAATCAGCAGTCTACCAAGCCCTATCACTAATACCACTCTGTCTCAGTTTACCGACCT
 GAATGTTTACCTGTGGGATGTCCACCACAGTAAAAGGCTTATTAAGTGGATGGGGTTGT
 GACCAAGAAGAGGAAATCCTACTGTGTTGACTTTGCTGCCATCCAGCCCCAGATCGCTTT
 ACTCCAGGAAATGCACGTTACACATTTTCGCTTCTCCCTGGACTGGGCCCTGATTCTCC
 TCTGGGTAAACAGTCCCAGGTGAACCACACCATCTGCAGTACTATCGCTGCATGG

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_153683 unedited
 NGGGGTTTGGATTTGTATACGACTCATATAGCGGCGCCGNATTCGCATGCCCGCCAGCG
 CCCC GCCGCGCCCGCCGCGGCCGCCGCGCCGCTGCTGCTGCTGCTGGTGTGCTGG
 GCCTGGGCGGCCGCCCTGCGTGCGGAGCCGGGCGACGCGCGCAGACCTGGGCCCGTT
 TCTCGCGGCTCCTGCCCCGAGGCCGCGGGCCTTCCAGGGCACCTTCCCCGACGGCT
 TCCTCTGGGCGTGGGAGCGCCGCTACCAGACCGAGGGCGGCTGGCAGCAGCACGGCA
 AGGGTGCCTCATCTGGGATACGTTCAACCACCACCCCTGGCACCCCGGGAGACTCCC
 GGAACGCCAGTCTGCCGTTGGGCGCCCGTCGCCGCTGCAGCCCGCCACCGGGGACGTAG
 CCAGCGACAGCTACAACAACGTCTTCCGCGACACGGAGGCGCTGCGCGAGCTCGGGGTCA
 CTCCTACTCCGCTTCTCCATCTCGTGGGCGGAGTGTCCCAATGGCAGCGCGGGGCTCC
 CCAACCGCGAGGGGCTGCGCTACTACCGCGCCTGCTGGAGCGGCTGCGGGAGCTGGGCG
 TGACGCCGTTGGTCAACCTGTACCACTGGGACCTGCCCCAGCGCCTGCAGGACGCTACG
 GCGGCTGGGCAACCGCGCCCTGGCCGACCACTTCAGGGATTACGCGGAGCTCTGCTTCC
 GCCACTTCGGCGGTCAAGTACTGGATCACCATCGACAACCCCTACGTGGTGGCCT
 GGCACGGCTACGCCACCGGGCGCCTGGCCCCGGCATCCGGGGCAGCCCGCGGCTCGGGT
 ACCTGGTGGCGACAACCTCCTCTGGCTCATGCCANAGTCTGGCCATCTCTACATACT

3' Read Nucleotide Sequence:	>Forward primer walk for NM_153683 unedited NNGGGGTGTGCGAGAAGCAAATTTTTGCTCTTTGCTTTGGNACCCACCTTGNATTTTC AACTTTTGGACCTCACATGAATCCGCCAATTGGAATCTCCCAACCTGAGGCAACTGCT TTCCTGGATTGACCTTGAATTTAACCATCTCAAATATTTATTGTGAAAAATGGCTGGTT TGTCTCAGGGACCACCAAGAGAGATGATGCCAAATATATGTATTACCTCAAAAAGTTCAT CATGGAAACCTTAAAAGCCATCAAGCTGGATGGGTGGATGTCATCGGGTATACCGCATG GTCCCTCATGGATGGTTTCGAGTGGCACAGAGGTTACAGCATCAGGCGTGGACTCTTCTA TGTTGACTTTCTAAGCCAGGACAAGATGTTGTTGCCAAAAGTCTTCAGCCTTGTTCTACCA AAAGCTGATAGAGAAAAATGGCTTCCCTCCTTTACCTGAAAATCAGCCCTAGAAAGGGAC ATTTCCCTGTGACTTTGCTTGGGGAGTTGTTGACAACACTACATTCAAGTAAGTCAGCTGAC AAAACCAATCAGCAGTCTACCAAGCCCTATCACTAATACCACTCTGTCTCAGTTTACCG ACCTGAATGTTTACCTGTGGGATGTCCACCACAGTAAAAGGCTTATTAAGTGGATGGGG TTGTGACCAAGAAGAGGAAATCCTACTGTGTTGACTTTGTGCCATCCAGCCCCAGATCG CTTTACTCCAGGAAATGCAGTTACACATTTTCGCTTCTCCCTGGACTGGGCCCTGATTC TCCCTCTGGGTAACCAAGTCCCAGGTGAACCACACCATCCTGCAGTACTATCGCTGCATGG CCAGCGAGCTTTGTCGTGCAACTCACCCAGTGGTG
Restriction Sites:	Please inquire
ACCN:	NM_153683
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_153683.2</u> , <u>NP_710150.1</u>
RefSeq Size:	5049 bp
RefSeq ORF:	5049 bp
Locus ID:	9365
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 (2) contains an additional segment within the coding region, which results in early translation termination, compared to variant 1. The resulting soluble isoform (b) contains a shorter C-terminus compared to isoform a.