

Product datasheet for RC202845

THG1L (NM_017872) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	THG1L (NM_017872) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	THG1L
Synonyms:	hTHG1; ICF45; IHG-1; IHG1; SCAR28; THG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202845 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTGGGGCGCCTGTAAGTTAAGGTTACGATTCTTGGCCACCATTTCATCACTCTGAGACGGTACC
 TGAGATTGGGGGCGACCATGGCAAAAAGCAAGTTCGAGTACGTGAGGGACTTCGAGGCTGACGACACCTG
 CCTGGCACACTGCTGGGTGGTAGTGC GGCTGGACGGCCGGAATTCATCGGTTTGCTGAGAAGCACAAC
 TTTGAAAACCAATGACAGCCGTGCTCTCCAGCTGATGACCAATGTGCGCAGACTGTGATGGAAGAAC
 TAGAGGATATTGTGATCGCGTATGGACAGAGTGATGAGTACAGCTTTGTGTTCAAGCGGAAAACCAATTG
 GTTTAAAAGAAGAGCCAGTAAGTTCATGACTCACGTGGCCTCCCAGTTTGCCTCCAGCTATGTGTTTTAT
 TGGCGGGATTACTTTGAGGACCAGCCCCCTTCTGTATCCCCAGGCTTTGACGGAAGAGTCGTGGTGTATC
 CCAGCAACCAGACTTTAAAGGACTACCTCAGCTGGCGACAAGCAGATTGTCACATCAATAATCTTTATAA
 TACAGTTTTCTGGGCACTTATACAACAATCTGGACTAACACCAGTACAAGCCCAAGGGAGATTACAGGGA
 ACTCTTGACGACAGACAAGAATGAGATTTGTTTCTGAATCAACATCACTATAATAATGAGCCGCCGA
 TGTATAGGAAAGGGACTGTGTTGATATGGCAGAAGGTGGATGAAGTGATGACAAAAGAAATTAAGCTGCC
 AACAGAAATGGAAGGAAAAAAGATGGCAGTGACCCGACCAGGACAAAGCCAGTGCCCTTGCACTGCGAT
 ATCATCGGGGATGCTTTCTGGAAGGAACATCCAGAGATTCTAGATGAAGACAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC202845 protein sequence
 Red=Cloning site Green=Tags(s)

MWGACKVKVHDSLATISITLRRYLRLGATMAKSKFEYVRDFEADDTCLAHCWVVRLDGRNFHRFAEKHN
 FAKPNDSRALQLMTKCAQTVMEELEDIVIAYGQSDEYSFVFKRKTNWFKRRASKFMTHVASQFASSYVFY
 WRDYFEDQPLL YPPGFDGRVVVYPSNQTLDYL SWRQADCHINNLYNTVFWAL IQQSGLTPVQAQGR LQG
 TLAADKNEILFSEFNINYNNEPPMYRKGTVL IWQKVDEVMTKEIKLPTEMEGKKMAVTRTRTKPVPLHCD
 IIGDAFWKEHPEILDEDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6429_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017872

ORF Size: 894 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_017872.2](#)

RefSeq Size: 1320 bp

RefSeq ORF: 897 bp

Locus ID: 54974

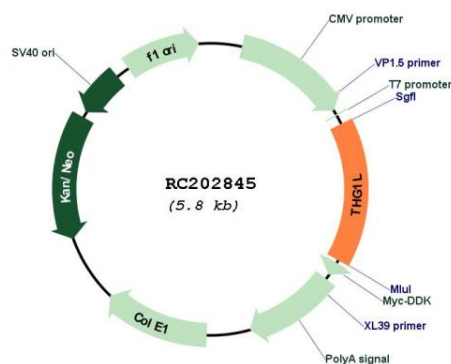
UniProt ID: [Q9NWX6](#)

Cytogenetics: 5q33.3

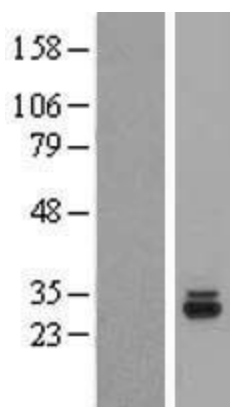
MW: 34.8 kDa

Gene Summary: The protein encoded by this gene is a mitochondrial protein that is induced by high levels of glucose and is associated with diabetic nephropathy. The encoded protein appears to increase mitochondrial biogenesis, which could lead to renal fibrosis. Another function of this protein is that of a guanylttransferase, adding GMP to the 5' end of tRNA(His). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2015]

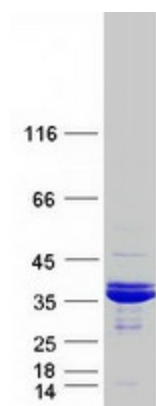
Product images:



Circular map for RC202845



Western blot validation of overexpression lysate (Cat# [LY413494]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202845 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified THG1L protein (Cat# [TP302845]). The protein was produced from HEK293T cells transfected with THG1L cDNA clone (Cat# RC202845) using MegaTran 2.0 (Cat# [TT210002]).