

Product datasheet for **KN202845**

THG1L Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	THG1L
Locus ID:	54974
Components:	KN202845G1 , THG1L gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTTAAGGTTACGATTTCCT KN202845G2 , THG1L gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCTGAGATTGGGGGCGACCA KN202845D , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTG TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAACTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGCT GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCACCAGC GTTTCTGGGT GAGCAAAAAC
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AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGCGTTT CGGTGATGAC
GGTGAAGAAC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA
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CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
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AAAGGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTT CCAGTCACGA CGTTGTAAAA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA

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CCTTGGCAAA	TGCTCAAGCT	GAGTGGA AAA	ATATATAAA	ATTGTATAG	CGAATAATC	CAATCTTGT
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AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT GAGCTAACTC ACATTAATTG
CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAAATGAA TCGGCCAACG
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CGTGATAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC GCGAGAACCA
CGCTCACCAG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA AGTGGTCCTG
CAACTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA
TAGTTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
TTCAGCTCCG GTTCCAACG ATC

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GE100003, scramble sequence in pCas-Guide vector

RefSeq:

[NM_001317824](#), [NM_001317825](#), [NM_001317826](#), [NM_017872](#)

UniProt ID:

[Q9NWX6](#)

Synonyms:

hTHG1; ICF45; IHG-1

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:

