

Product datasheet for **RG203497**

Transketolase (TKT) (NM_001064) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Transketolase (TKT) (NM_001064) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Transketolase
Synonyms:	HEL-S-48; HEL107; SDDHD; TK; TKT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG203497 representing NM_001064
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGAGCTACCACAAGCCTGACCAGCAGAAGCTGCAGGCCTTGAAGGACACGGCAACCCGCTACGTA
 TCAGCTCCATCCAGGCCACCACTGCGGGCGGCTCTGGCCACCCACGTCATGCTGCAGCGCCGAGAGAT
 CATGGCTGTCTCTTTTTCCACACCATGCGCTACAAGTCCAGGACCCCGGAATCCGCACAATGACCGC
 TTTGTGCTCTCCAAGGGCCATGCAGCTCCCATCTCTACGCGGTCTGGGCTGAAGCTGGTTTCTGGCCG
 AGGCGGAGCTGTGAACCTGAGGAAGTACAGCTCCGACTTGGACGGGCACCCGGTCCCGAAAACAGCTTT
 CACCGAGCTGGCCACTGGCTCCCTGGGCCAGGGCCTCGGGGCCGCTTGTGGGATGGCTACACCGGCAAA
 TACTTCGACAAGGCCAGTACCGAGTCTATTGCTTGTCTGGGAGATGGGGAGCTGCAGAGGGCTCTGTAT
 GGGAGGCCATGGCCTTCGCCAGCATCTAAGCTGGACAACCTTGTGGCATTCTAGACATCAATCGCT
 GGGCCAGAGTGACCCGGCCCGCTGCAGCACAGATGGACATCTACCAGAAGCGGTGCGAGGCCTTCGGT
 TGGCATGCCATCATCGTGGATGGACACAGCGTGGAGGAGCTGTGCAAGGCCTTTGGCCAGGCCAAGCACC
 AGCCAACAGCCATCATTGCCAAGACCTCAAGGGCCGAGGGATCACGGGGGTAGAAGATAAGGAGTCTTG
 GCATGGGAAGCCCTCCCAAAAACATGGCTGAGCAGATCATCCAGGAGATCTACAGCCAGATCCAGAGC
 AAAAAGAAGATCCTGGCAACCCCTCCACAGGAGGACGCACCCCTCAGTGGACATTGCCAACATCCGCATGC
 CCAGCTGCCAGCTACAAAGTTGGGGACAAGTAGCCACCCGCAAGGCCTACGGGCAGGCACTGGCCAA
 GCTGGGCCATGCCAGTGACCGCATCATCGCCCTGGATGGGGACACCAAAAATCCACCTTCTCGGAGATC
 TTCAAAAAGGAGCACCCGACCGCTTCTCGAGTGTACATTGCCGAGCAGAACATGGTGAAGCATCGCGG
 TGGCTGTGCCACCCGCAACAGGACGGTCCCTTCTGCAGCACTTTTGCAGCCTTCTTACGCGGGCCTT
 TGACCAGATTCGCATGGCCGCCATCTCCGAGAGCAACATCAACCTCTGCGGCTCCCACTGCGGCGTTTCC
 ATCGGGGAAGACGGGCCCTCCAGATGGCCCTAGAAGATCTGGCTATGTTTCGGTCAGTCCCCACATCAA
 CTGTCTTTTACCAAGTGATGGCGTTGCTACAGAGAAGGCACTGGAACCTAGCCGCAATACAAAGGGTAT
 CTGCTTCCATCCGGACCAGCCGCCAGAAAATGCCATCATCTATAACAACAATGAGGACTTCCAGGTCCGA
 CAAGCCAAGTGGTCTGAAGAGCAAGGATGACCAGGTGACCGTTATCGGGGCTGGGGTACCCTGCACG
 AGGCCTTGGCCGCTGCCGAAGTCTGAAGAAAAGAAAAGATCAACATCCGCGTGTGGACCCCTTACCAT
 CAAGCCCTGGACAGAAAATCATTCTCGACAGCGCTCGTGCCACCAAGGGCAGGATCCTCACCGTGGAG
 GACCATTATTATGAAGGTGGCATTGGTGAAGGCTGTGTCCAGTGCAGTAGTGGGCGAGCCTGGCATACTG
 TACCCACCTGGCAGTTAACCGGTACCAAGAAGTGGGAAGCCAGCTGAGCTGCTGAAGATGTTTGGTAT
 CGACAGGGATGCCATTGACAAGCTGTGAGGGCCTCATCACAAGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG203497 representing NM_001064
 Red=Cloning site Green=Tags(s)

MESYHKPDQQLQALKDTANRLRISSIQATTAAGSGHPTSCCSAAEIMAVLFFHTMRYKSQDPRNPHNDR
 FVL SKGHAAPIL YAVWAEAGFLAEALLNLRKISSDL DGHVPKQAF TDVATGSLGQGLGAACGMAYTGK
 YFDKASYRVYCLLDGDELSEGSVWEAMAFASIYKLDNLVAILDINRLGQSDPAPLQHQMEDIYQKRCEAFG
 WHAIIVDGHSVEELCKAFGQAKHQPTAIIAKTFKGRGITGVEDKESWHGKPLPKNMAEQIIQEIYSQIQS
 KKKILATPPPQEDAPSVDIANIRMP SLPSYKVGDKIATR KAYQALAKLGHASDR IALDGDTKNSTFSEI
 FKKEHPDRFIECYIAEQNMVSI AVGCATRNRTVPFCSTFAAFFTRAFDQIRMAAISESNINLCGSHCGVS
 IGEDGPSQMALEDLAMFRSVPTSTVFYPSDGVATEKAVELAANTKGICFIRTSR PENAI IYNNNEDFQVG
 QAKVVLKSKDDQVTVIGAGVTLHEALAAE LKKEKINIRVLDPFITKPLDRKLI L DSARATKGRILTV E
 DHYYEGGIGEAVSSAVVGEPI TVTHLAVNRVPRSGKPAELLKMF GIDRDAIAQAVRGLITKA

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001064

ORF Size: 1869 bp

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 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: 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).

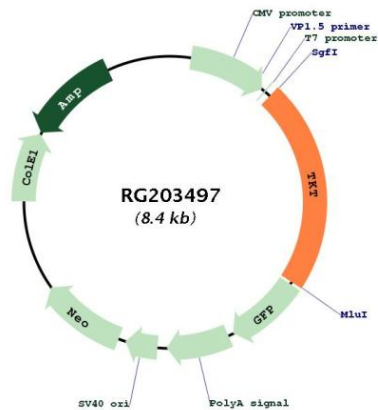
Reconstitution Method:

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_001064.1](#), [NP_001055.1](#)

RefSeq Size: 2038 bp
RefSeq ORF: 1872 bp
Locus ID: 7086
UniProt ID: [P29401](#)
Cytogenetics: 3p21.1
Domains: transketolase, transket_pyr, transketolase_C
Protein Families: Druggable Genome
Protein Pathways: Metabolic pathways, Pentose phosphate pathway
Gene Summary: This gene encodes a thiamine-dependent enzyme which plays a role in the channeling of excess sugar phosphates to glycolysis in the pentose phosphate pathway. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2012]

Product images:



Circular map for RG203497