

Product datasheet for **RG202424**

ketohexokinase (KHK) (NM_000221) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ketohexokinase (KHK) (NM_000221) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ketohexokinase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202424 representing NM_000221 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGAAGCAGATCCTGTGCGTGGGGCTAGTGGTCTGGACGTCATCAGCCTGGTGGACAAGTACC
CTAAGGAGGACTCGGAGATAAGGTGTTTGTCCCAGAGATGGCAGCGCGGAGGCAACGCGTCCAACCTCTG
CACCATTCTCCCTGCTCGGAGCCCCCTGTGCCTTCAATGGCTCCTGGCCATGTTGCTGAT
TTTGTCTGGATGACCTCCGCCGTTATTCTGTGGACCTACGCTACACAGTCTTTCAGACCACAGGCTCCG
TCCCATCGCCACGGTCAATCAACGAGGCCAGTGGTAGCCGCACCATCTATACTATGACAGGAGCCT
GCCAGATGTGTCTGCTACAGACTTTGAGAAGGTTGATCTGACCCAGTTCAAGTGGATCCACATTGAGGGC
CGGAACGCATCGGAGCAGGTGAAGATGCTGCAGCGGATAGACGCACACAACACCAGGCAGCCTCCAGAGC
AGAAGATCCGGGTGTCCTGGAGGTGGAGAAGCCACGAGAGGAGCTCTTCCAGCTGTTTGGCTACGGAGA
CGTGGTGTGTCAGCAAAGATGTGGCCAAGCACTTGGGGTTCAGTCAGCAGAGGAAGCCTTGGAGGGC
TTGTATGGTCGTGTGAGGAAAGGGGCTGTGCTTGTCTGTGCCTGGGCTGAGGAGGGCGCCGACGCCCTGG
GCCCTGATGGCAAATTGCTCCACTCGGATGCTTCCCAGCCACCCCGTGGTGGATACACTGGGAGCTGG
AGACACCTTCAATGCCTCCGTCACTTTCAGCCTCTCCAGGGGAGGAGCGTGCAGGAAGCACTGAGATTC
GGTGCCAGGTGGCCGCAAGAAGTGTGGCCTGCAGGGCTTTGATGGCATCGT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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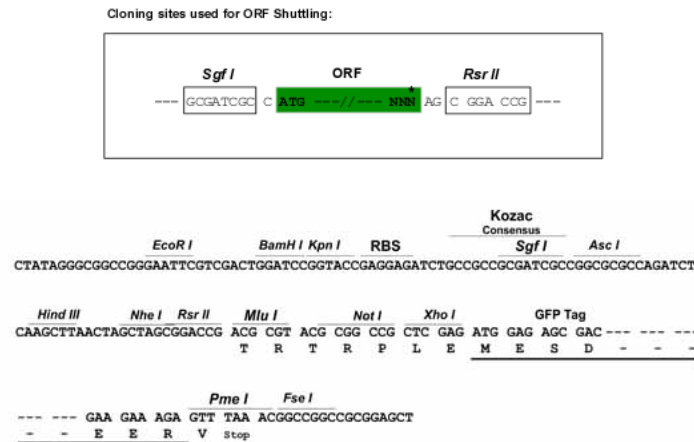
Protein Sequence: >RG202424 representing NM_000221
 Red=Cloning site Green=Tags(s)

MEEKQILCVGLVVLVDVLSLVDPKYPKEDSEIRCLSQRWQRGGNASNSCTILSLLGAPCAFMGSMAPGHVAD
 FVLDDLRRYSVDLRYTVFQTTGTSVPIATVIINEASGSRTILYYDRSLPDVSATDFEKVDLTQFKWIHIEG
 RNASEQVKMLQRIDAHNTRQPPEQKIRVSVEVEKPREELFQLFGYGDVVFVSKDVAKHLGFQSAEEALRG
 LYGRVRKGAVLVCAWAEEGADALGPDGKLLHSDAFPPPRVVDTLGAGDTFNASVIFSLSQGRSVQEALRF
 GCQVAGKKCGLQGFQFDGIV

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_000221

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.

RefSeq: [NM_000221.1](#), [NP_000212.1](#)

RefSeq Size: 2433 bp

RefSeq ORF: 897 bp

Locus ID: 3795

UniProt ID: [P50053](#)

Cytogenetics: 2p23.3

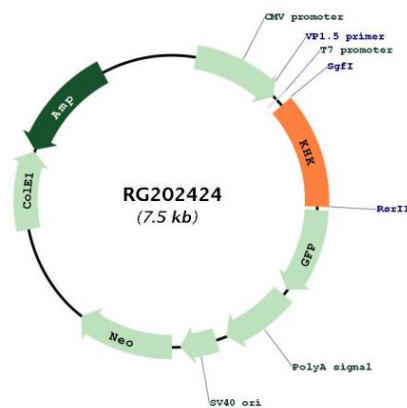
Domains: pfkB

Protein Families: Druggable Genome

Protein Pathways: Fructose and mannose metabolism, Metabolic pathways

Gene Summary: This gene encodes ketohexokinase that catalyzes conversion of fructose to fructose-1-phosphate. The product of this gene is the first enzyme with a specialized pathway that catabolizes dietary fructose. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202424