OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC223488

ketohexokinase (KHK) (NM_006488) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ketohexokinase (KHK) (NM_006488) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ketohexokinase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223488 representing NM_006488 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAAGAGAAGCAGATCCTGTGCGTGGGGCTAGTGGTGCTGGACGTCATCAGCCTGGTGGACAAGTACC CTAAGGAGGACTCGGAGATAAGGTGTTTGTCCCAGAGATGGCAGCGCGGAGGCAACGCGTCCAACTCCTG CACCGTTCTCTCCCTGCTCGGAGCCCCCTGTGCCTTCATGGGCTCAATGGCTCCTGGCCATGTTGCTGAC TTCCTGGTGGCCGACTTCAGGCGGCGGGGCGTGGACGTGTCTCAGGTGGCCTGGCAGAGCAAGGGGGACA CCCCCAGCTCCTGCTGCATCATCAACAACTCCAATGGCAACCGTACCATTGTGCTCCATGACACGAGCCT GCCAGATGTGTCTGCTACAGACTTTGAGAAGGTTGATCTGACCCAGTTCAAGTGGATCCACATTGAGGGC CGGAACGCATCGGAGCAGGTGAAGATGCTGCAGCGGATAGACGCACACAACACCAGGCAGCCTCCAGAGC AGAAGATCCGGGTGTCCGTGGAGGTGGAGAAGCCACGAGAGGAGCTCTTCCAGCTGTTTGGCTACGGAGA CGTGGTGTTTGTCAGCAAAGATGTGGCCAAGCACTTGGGGTTCCAGTCAGCAGAGGAAGCCTTGAGGGGC TTGTATGGTCGTGTGAGGAAAGGGGCTGTGCTTGTCTGTGCCTGGGCTGAGGAGGGCGCCGACGCCCTGG GCCCTGATGGCAAATTGCTCCACTCGGATGCTTTCCCGCCACCCCGCGTGGTGGATACACTGGGAGCTGG AGACACCTTCAATGCCTCCGTCATCTTCAGCCTCTCCCAGGGGAGGAGCGTGCAGGAAGCACTGAGATTC GGGTGCCAGGTGGCCGGCAAGAAGTGTGGCCTGCAGGGCTTTGATGGCATCGTG AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC TGGATTACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC223488 representing NM_006488
Red=Cloning site Green=Tags(s)

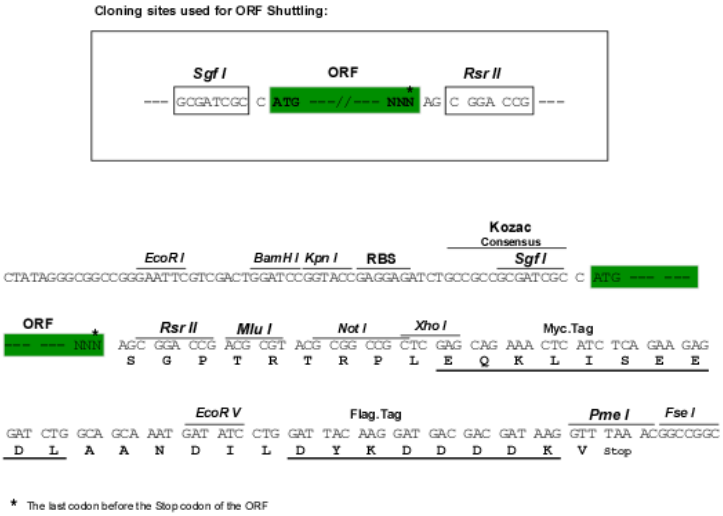
MEEKQILCVGLVVLDVISLVDKYPKEDSEIRCLSQRWQRGGNASNSCTVLSLLGAPCAFMGSMAPGHVAD
FLVADFRRRGVDVSQVAWQSKGDTPSSCCIINNSNGNRTIVLHDTSLPDVSATDFEKVDLTQFKWIHIEG
RNASEQVKMLQRIDAHNTRQPPEQKIRVSVEVEKPREELFQLFGYGDVVFVSKDVAKHLGFQSAEEALRG
LYGRVRKGAVLVCAWAEEGADALGPDGKLLHSDAFPPPRVVDTLGAGDTFNASVIFSLSQGRSVQEALRF
GCQVAGKKCGLQGFDGIV

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6617_a09.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_006488

ORF Size: 894 bp

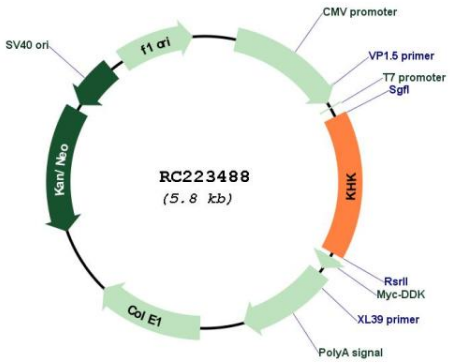
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

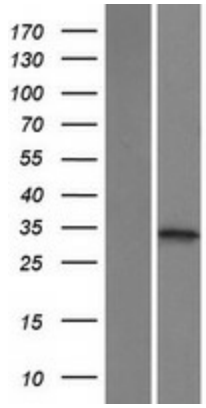
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_006488.3
RefSeq Size:	1899 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
MW:	32.3 kDa
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]

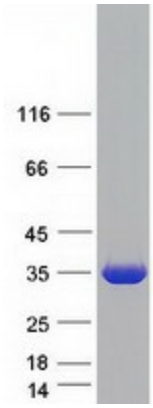
Product images:



Circular map for RC223488



Western blot validation of overexpression lysate (Cat# [LY416608]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223488 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KHK protein (Cat# [TP323488]). The protein was produced from HEK293T cells transfected with KHK cDNA clone (Cat# RC223488) using MegaTran 2.0 (Cat# [TT210002]).