

Product datasheet for **MR231286**

Hk3 (NM_001206392) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hk3 (NM_001206392) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hk3
Synonyms:	HK-III; HK III
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>MR231286 representing NM_001206392
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGCAGGCACTGAAGGGACAGGACAGTCCCCTCCTTCTGTCCGGATGCTGCCACATACGTGAGGT
 CCACACCACACGGCACCGAGCAAGGGATTTCCTGGTGTGGAGCTGGGGCCACAGGAGCATCACTACG
 TGTGTTGTGGTAACTGACAGGCACCAAAGAATGCCGGGTGGAGCCAGGAGCCGGGAGTTTGTGATT
 CCTCAAGAGGTGATCCTAGGTGCTGGCCAGCAGCTCTTTGACTTTGCTGCCCGATGCCTCTCTGAATTCC
 TGGATGCATACCCCGTGGAGAATCAGGGTCTGAAGCTTGGGTTCAATTTCTTTTTCTTGTCCACCAGC
 AGGCTTGGACAGGAGCACCTCATTTCTGGACAAAAGTTTTAGGTGCAGCGGCGTGAAGGCCAGGAT
 GTGGTCCAGTTGCTAAGAGATGCCATTCAGAGGCAGGGACCTACAGGATTGATGTGGTAGCCATGGTGA
 ATGACACGGTGGGCACCATGATGGGCTGTGAGCTGGGCACCAGGCCGTGAAGTCGGGCTGATTGTAGA
 CACCGGTACCAACGCGTCTACATGGAGGAGCGCGGCACGTGGCCGCTCTGGATGAGGACCGCGGCCGC
 ACCTGTGTGAGCATCGAGTGGGCTCCTTCTATGACGAAGATGCTCTAGGGCCAGTACTGACCACCTTCG
 ACTCTGCCCTGGACCGGAGTCCCTGACTCCTGGTGTCAAAGTTTTGAGAAGATGATTGGAGGCCTTTA
 CCTGGGTGAGCTGGTGGGCTGGTTCTGGTCCACTTGACCCAGCACGGGGTCTCTTTGATGGTGCGCC
 TCTCCTGCGTTGCTGAGTCAAGGCTGTATCCTCCTGGACCAGTGGTGAGATGGAGGACACCGCCACTG
 GGACAGCCCGCTCCACACCATCCTGCAGGACTTGGGTCTGAGCCCTCGGGCCTCAGATGCTGAAGTGGT
 GCAATATGTGTGCGTGGCTGTGTGCACACGGGCTGCCAGCTCTGTGCGGCTGCCCTGGTGCAGTCCCT
 TCCCGCTCCAGCACAGCAGGGAGCAGACATTGCAAGTGGCTGTGGCCACTGGAGGGCAGTGTGTTG
 AACGACACCCAGGTTCTCCGAATCCTAAAGGAGACGGTAACACTCCTGGCCCCAAACTGTGATGCTC
 CTTTATCCCTCTGTGGATGGTGGTGGCGGGGTGTGGCAATGGTGACAGCTGTGGCTGCCCGCTGGCT
 GCTCACAGGCGCATCCTGGAAGAGACCTGGCACCATTTAGCTGACCTTGGAGCAGATGACAGTGGTGC
 AGGCACAAATGCGGGAAGCCATGATCAGGGGGCTTCAAGGAGAGGCTCCTCCCTCCGCATGCTGCCAC
 TTACGTCGAGCGACGCCGACGGCAGCGAGGATTTCTGGCCTTGGACCTAGGGGGCACCAAC
 TTCCGGGTCTGTTGGTACGAGTGGCGGAGGCGAGTGTGCAGATCAACCAGGTCTACTCCATTCCTG
 AGTGTAGAGCCAGGCTCTGGACAGAAGCTCTTTGACCATATTGTGGACTGCATCGTGGACTTCCAGAA
 GAGGCAGGGCCTTAGTGGACAGAGCCTACCCCTGGGTTTACCTTCTCTTTCCCATGCAAGCAGCTTGGC
 CTGGACCAGGGCATCCTCCTGAATTGGACTAAGGGTTCAATGCATCAGGCTGTGAGGGCCAGGATGTTG
 TGTATCTATTACGGGAAGCCATTAGGCGCAGACAGGCAGTGGAGCTGAATGTGGTTGCCATTGTCAATGA
 CACGGTGGGGACCATGATGTCCTGTGGTATGATGATCCCGTTGTGAGATGGGCCTCATTGTCCGAACC
 GGCACCAACGCCTGTTACATGGAAGAGCTCCGCAATGTGGCAAGTGTGCCTGGGGACTCGGGCCTCATGT
 GCATCAACATGGAGTGGGGTGCCTTTGGGGATGATGGCTCACTGGGCACACTCAGCACCCGCTTTGACAC
 CAGTGTGGACCAGGCATCCATCAATCCAGGCAACAGAGGTTTGGAGAAATGATCAGCGGTATGTAATTG
 GGGGAGATCGTCCGCATATCCTCCTGCACTTAACCAATCTCGGAGTTCTTCCGAGGCCAGAAGACTC
 AATGCCTTCAGGCCAGGGACATCTTCAAGACTAAGTTCCTCTCTGAGATCGAAAGTATAGCCTGGCCCT
 GCGTCAGTCCGAGCCATCCTGGAAGATCTGGGGCTGACTCTGACATCTGATGACGCCTTATGGTCTG
 GAAGTGTGCCAGGCTGTGTCTCGCAGGGCTGCCAACTCTGTGGGGCAGGTGTGGCTGCCGTGGTGGAGA
 AGATTCCGGGAGAACCAGGGCCTGCAGGAGCTGACAGTGTCTGTGGGAGTATAGTGGGACACTCTACAGCT
 ACATCCTCACTTCTCCAAGCTGGTGTCCGCAACAGTCCGGAAGCTAGCCCTCAGTGCACCGTCACTTTT
 TTGAGTCCGAGGATGGGTCTGGCAAAGGCGCAGCTTTGGTACTGCTGTTGCTTGTGCGCTTACCCAGA
 TGGCCACGTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231286 representing NM_001206392
 Red=Cloning site Green=Tags(s)

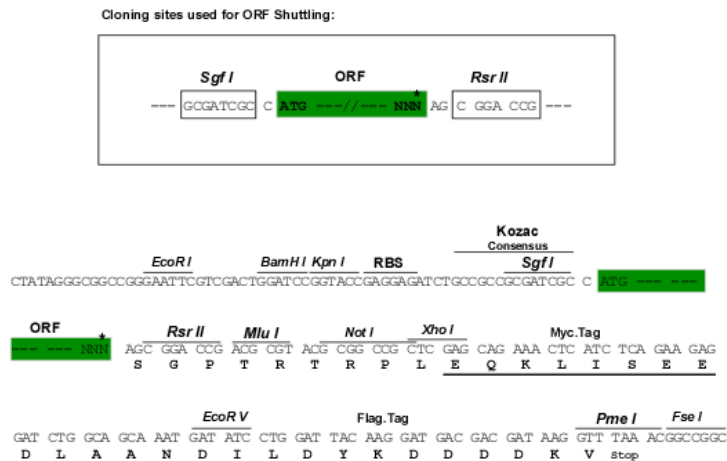
MEQALKGQDSPAPSVRMLPTYVRSTPHGTEQGDFLVLELGATGASLRVLWVTLTGTKECRVEPRSREFVI
 PQEVLGAGQQLFDFAARCLSEFLDAYPVENQGLKLGFNFSFPCHQTGLDRSTLISWTKGFRCSGVEGQD
 VVQLLRDAIQRQGTYRIDVVAMVNDTVGTMGCELGTRPCEVGLIVDTGTNACYMEEARHVAALDEDRGR
 TCYSIEWGSFYDEDALGPVLTTFDSALDRESLTPGAQRFEKMIIGLYLGELVRLVLVHLTQHGVLFDGCA
 SPALLSQGCILLDHVAEMEDTATGTARVHTILQDLGLSPRASDAELVQYVCVAVCTRAAQLCAAALA AVL
 SRLQHSREQQTQAVATGGRVFERHPRFLRILKETVTL LAPNCDVSFIPSVDDGGGRGVAMVTAVAARLA
 AHRRILEETLAPFQLTLEQMTVVQAQMREAMIRGLQGEASSLRMLPTYVRATPDGSEGRDFLALDLGGTN
 FRVLLVRVAEGSVQIINQVYSIPECRAQSGQKLFDHIVDCIVDFQKRQGLSGQSLPLGFTFSFPCKQLG
 LDQGILLNWTGKFNASGCEGQDVVYLLREAIRRRQAVELNVVAIVNDTVGTMMSCGYDDPRCEMGLIVGT
 GTNACYMEELRNVASVPGDSGLMCINMEWGAFGDDGSLGTLSTRFDTSDVQASINPGKQRFKEMISGMYL
 GEIVRHILLHLTNLGVLFGRQKQCLQARDIFKTKFLSEIESDSLALRQVRAILEDLGLTLTSDDALMVL
 EVCQAVSRRAAQLCGAGVAAVVEKIRENRGLQELTVSVGVDGTLYKLHPHF SKLVSATVRKLPQCTVTF
 LQSEDGSGKGAALVTAVACRLTQMAHV

SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

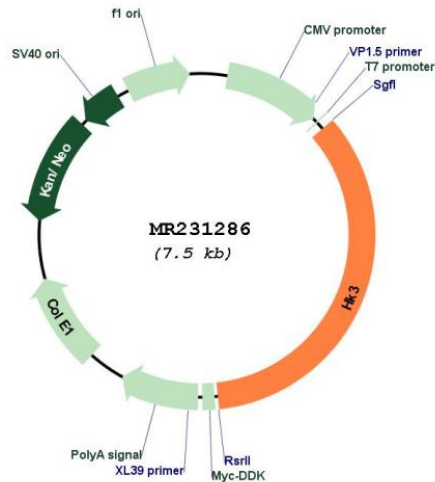
Restriction Sites:

SgfI-RsrII

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001206392

ORF Size: 2601 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_001206392.1](#), [NP_001193321.1](#)

RefSeq Size: 3099 bp

RefSeq ORF: 2604 bp

Locus ID: 212032

Cytogenetics: 13 B1

MW: 94.7 kDa

Gene Summary:

Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D-fructose 6-phosphate, respectively). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate. [UniProtKB/Swiss-Prot Function]