

Product datasheet for **RR214718**

Hk1 (NM_012734) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hk1 (NM_012734) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hk1
Synonyms:	HEXOKIN; HKI
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR214718 representing NM_012734
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATCGCCGCGCAACTACTGGCCTATTACTTCACCGAGCTGAAGGATGACCAAGTCAAAAAGATTGACA
 AGTATCTGTACGCCATGCGGCTCTCTGATGAGATTCTGATAGATATCCTGACACGATTCAAGAAAGAGAT
 GAAGAATGGCCTCTCCCGGATTATAATCCAACAGCCTCCGTCAAGATGCTGCCACCTTCGTCGGTCC
 ATTCGGACGGCTCAGAAAAGGGGATTTCATTGCCCTGGATCTCGGCGGGTCTTCTTTTGAATCTCGC
 GGGTGCAGGTGAACCACGAGAAGAACCAGAACGTGAGCATGGAGTCTGAGATCTACGACACCCAGAGAA
 CATCGTGCATGGCAGTGGAAACCCAGCTTTTCGATCATGTCGCTGACTGCCTGGGAGACTTCATGGAGAAA
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 GTTGCTGAATAAAGCCATTAAGAAGCGAGGGGACTATGATGCTAACATTGTCGCCGTGGTGAATGACACA
 GTAGGGACCATGATGACCTGCGGTTATGATGACCAACAGTGTGAAGTCCGGCTGATCATTGGCACAGGCA
 CCAATGCTTGCTACATGGAGGAAGTGCACACATCGACCTGGTGGAAAGGCGACGAGGGGAGGATGTGTAT
 TAACACGGAATGGGGAGCCTTTGGGGATGATGGGTCCCTGGAAGACATCCGAACCGAGTTTGACAGAGAG
 TTAGACCGTGGATCTCTCAACCTGGGAAGCAGCTGTTGAGAAGATGGTGGAGCGCATGTACATGGGGG
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 GCTGCTCACGAGGGGAAAGTTCAACACTAGTGACGTGTCCGCCATTGAAAAGGATAAGGAAGGCATTCAA
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 TCTCAGAGAGTGGCACGGGCAAGGGGGCCGCATGGTGACGGCAGTAGCCTACCGCCTGGCTGAGCAGCA
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 TCAGACGAACTGGACTGTGGAATCTTGATCTCATGGACAAGGGTTTCAAAGCCACTGACTGTGAGGGC
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 CTCAGAGGAGACCCTTCGATCGCC

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR214718 representing NM_012734
 Red=Cloning site Green=Tags(s)

MIAAQLLAYFYTELKDDQVKKIDKYLAMRLSDEILIDILTRFKKEMKNGLSRDYNPTASVKMLPTFVRS
 IPDGSEKGFIALDLGGSSFRI LR VQVNHEKNQNVSMSEIYDTPENIVHSGTQLFDHVADCLGDFMEK
 KLIKDKKLPVGF TFSFPCRQSKIDEAVLITWTKRFKASGVEGADVVKLLNKAIKKRGDYDANIVAVVNDT
 VGTMMTCGYDDQCEVGLIIGTGNACYMEELRHIDLVEGDEGRMCINTEWGAFGDDGSLEDIRTEFDRE
 LDRGSLNPGKQLFEKMVSGMYMGELVRLILVKMAKEGLLFEGRITPELLTRGKFNTSDVSAIEKDKEGIQ
 NAKEILTRLGVEPSDVDCVSVQHICTIVSFRSANLVAATLGAILNRLRDNKGT PRLRTTVGVDGSLYKMH
 PQYSRRFHKTLRRLVPDSVRFLLSESGTGKGAAMVTAVAYRLAEQHRQIEETLAHFRLSKQTLMEVKKR
 LRTEMEMGLRKETNSKATVKMLPSFVRSIPDGTEHGDFLALDLGGTNFRVLLVKIRSGKKRTVEMHNKIY
 SIPLEIMQGTGDELFDHIVSCISDFLDYMGIKGPRMPLGFTFSFPCHQTNLDCGILISWTKGFKATDCEG
 HDVASLLRDAVKRREEDLDVVAVVNDTVGTMMTCAYEPTCEIGLIVGTGNACYMEEMKNVEMVEGNQ
 GQMCINMEWGAFGDNGCLDDIRDFDKVDEYSLNSGKQRF EKMI SGMYLGEIVRNILIDFTKKGFLFRG
 QISEPLKTRGIFETKFLSQIESDR LALLQVRAILQQLGLNSTCDD SILVKTVCGVVSKRAAQLCGAGMAA
 VVEKIRENRGLDHLNVTVGVDGTYKLHPHF SRIMHQT VKELSPKCTVSFLL SEDGSGKGAALITAVGVR
 LRGDPSIA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

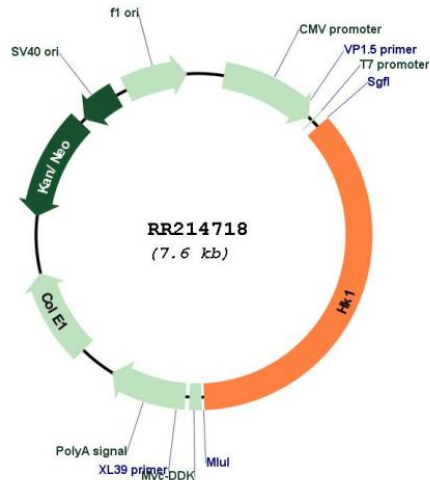
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_012734

ORF Size: 2754 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_012734.1](#), [NP_036866.1](#)

RefSeq Size: 3653 bp

RefSeq ORF: 2757 bp

Locus ID: 25058

UniProt ID: [P05708](#)

Cytogenetics: 20q11

MW: 102.4 kDa

Gene Summary: a ATP:D-hexose 6-phosphotransferase involved in the phosphorylation of glucose to produce glucose-6-phosphate [RGD, Feb 2006]