

## Product datasheet for MR225764

### Hipk3 (NM\_001145824) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hipk3 (NM_001145824) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hipk3
Synonyms:	DYRK6; FIST3; mir-1902; PKY
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR225764 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTCACAAGTCTTGGTCTACCCACCGTATGTTTATCAAACCTCAGTCAAGTGCCTTTTGTAGTGTGA  
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**Protein Sequence:**

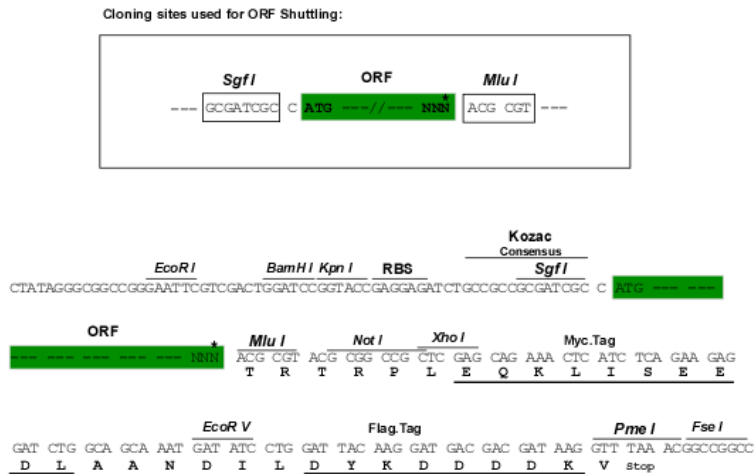
>MR225764 protein sequence  
 Red=Cloning site Green=Tags(s)

```
MASQVLVYPPYVYQTQSSAFCSVKLKVESGCVFQERTYPQIHVNGRNFNSHPSTKGSFAFQTKIPFTK
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MQIVDELSTILPAMLQTNMGNPVTVVTTATGSKQNCSTSGEGDYQLVQHEVLCSMKNTYEVLDLGRGTFGQ
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VSKTVCSTYLQSRYYRAPEIILGLPFCEAIDMWSLGCVIAELFLGWPLYPGALEYDQIRYISQTQGLPGE
QLLNVTGKSTRFFCRETDMSHSGWRKLTLEEHEAETGMKSKEARKYIFNSLDDIVHVNTVMDLEGGDLA
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RRQQAYIPTSVTSNPFTLSHGSPNHTAVHAHLAGSTHLGGQPTLLPYSSASLSSAAPVAHLLASPCTSR
PMLQHPTYNIHPSGIVHQVPGINRLLPSPTIHQTQYKIPFPHSYIAASPAYTGFPPLSPTKLSQYPY
M
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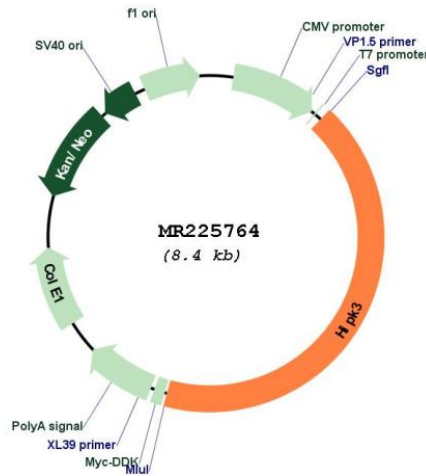
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001145824

**ORF Size:** 3573 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\\_001145824.1](#), [NP\\_001139296.1](#)

**RefSeq Size:** 7494 bp

**RefSeq ORF:** 3576 bp

**Locus ID:** 15259

**Cytogenetics:** 2 E2

**MW:** 130 kDa

**Gene Summary:**

Serine/threonine-protein kinase involved in transcription regulation, apoptosis and steroidogenic gene expression. Phosphorylates JUN and RUNX2. Seems to negatively regulate apoptosis by promoting FADD phosphorylation. Enhances androgen receptor-mediated transcription. May act as a transcriptional corepressor for NK homeodomain transcription factors. The phosphorylation of NR5A1 activates SF1 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. In osteoblasts, supports transcription activation: phosphorylates RUNX2 that synergizes with SPEN/MINT to enhance FGFR2-mediated activation of the osteocalcin FGF-responsive element (OCFRE).[UniProtKB/Swiss-Prot Function]