

## Product datasheet for SC111879

### HIPK3 (AF305239) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HIPK3 (AF305239) Human Untagged Clone
Tag:	Tag Free
Symbol:	HIPK3
Synonyms:	DYRK6; FIST3; PKY; YAK1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC111879 sequence for AF305239 edited (data generated by NextGen Sequencing)

```

ATGGCCTCACAAGTCTTGGTCTACCCACCATATGTTTATCAAACCTCAGTCAAGTGCCTTT
TGTAGTGTGAAGAACTCAAAGTAGAGCCAAGCAGTTGTGTATTCCAGGAAAGAACTAT
CCACGGACCTATGTGAATGGTAGAACTTTGAAATTCTCATCCTCCCACTAAGGGTAGT
GCTTTTCAGACAAAGATACCATTTAATAGACCTCGAGGACACAACCTTTTCATTGCAGACA
AGTGCTGTTGTTTTGAAAAACACTGCAGGTGCTACAAAGGTCATAGCAGCTCAGGCACAG
CAAGCTCACGTGCAGGCACCTCAGATTGGGGCGTGGCGAAACAGATTGCATTTCCAGAA
GGCCCCCAGCGATGTGGATTGAAGCGCAAGAGTGAGGAGTTGGATAATCATAGCAGCGCA
ATGCAGATTGTCGATGAATTGTCCATACTTCTGCAATGTTGCAAACCAACATGGGAAAT
CCAGTGACAGTTGTGACAGCTACCACAGGATCAAACAGAAATTGTACCACTGGAGAAGGT
GACTATCAGTTAGTACAGCATGAAGTCTTATGCTCCATGAAAAACTTACGAAGTCCTT
GATTTTCTTGGTCGAGGCACGTTTGGCCAGGTAGTTAAATGCTGGAAAAGAGGGACAAAT
GAAATTGTAGCAATCAAATTTTGAAGAATCATCCTTCTTATGCCCGTCAAGGTCAAATA
GAAGTGAGCATATTAGCAAGGCTCAGTACTGAAAATGCTGATGAATATAACTTTGTACGA
GCTTATGAATGCTTTCAGCACCGTAACCATACTTGTGTTAGTCTTTGAGATGCTGGAACAA
AACTTGTATGACTTTCTGAAACAAAATAAATTTAGTCCCCTGCCACTAAAAGTGATTCGG
CCCATTCTCAACAAGTGGCCACTGCACTGAAAAAATTGAAAAGTCTTGGTTTAATTCAT
GCTGATCTCAAGCCAGAGAATATTATGTTGGTGGATCCTGTTCCGCGAGCCTTACAGGGTT
AAAGTAATAGACTTTGGGTCGGCCAGTCATGTATCAAAGACTGTTTGTCAACATATCTA
CAATCTCGGTAACAGAGCTCCAGAGATTATATTGGGGTTGCCATTTTGTGAAGCCATA
GACATGTGGTCATTGGGATGTGTGATTGCAGAATTATTTCTTGGATGGCCGCTCTACCCA
GGAGCCTTGGAGTATGATCAGATTGCATACATTTCTCAGACTCAAGGTTTCCAGGAGAA
CAGTTGTTAAATGTGGTACTAAATCCACAAGATTTTTTTGCAAAGAAACAGATATGTCT
CATTCTGGTTGGAGATTAAGACATTGGAAGAGCATGAGGCAGAGACAGGAATGAAGTCT
AAAGAAGCCAGAAAATACATTTTCAACAGTCTGGATGATGTAGCGCATGTGAACACAGTG
ATGGATTTGGAAGGAAGTATCTTTTGGCTGAGAAAGCTGATAGAAGAGAATTTGTAGT

```



[View online »](#)

CTGTTGAAGAAAATGTTGCTGATTGATGCAGATTTAAGAATTACTCCAGCTGAGACCCCTG  
 AACCATCCTTTTGTAAATATGAAACATCTTCTAGATTTCCCTCATAGCAACCATGTAAG  
 TCCTGTTTTTCATATTATGGATATTTGTAAGTCCCACCTAAATTCATGTGACACAAATAAT  
 CACAACAAAACCTCACTTTTAAGACCAGTTGCTTCAAGCAGTACTGTACACTGACTGCA  
 AATTTTACTAAAATCGGAACATTAAGAAGTCAGGCATTGACCACATCTGCTCATTAGTT  
 GTGCACCATGGAATACCTCTGCAGGCAGGAAGTCTCAGTTTGGTTGTGGTGATGCTTTT  
 CAGCAGACATTGATTATCTATCCCCAGCTATTCAAGGTATTCCTGCAACACATGGTAAA  
 CCCACCAGTTATTCAATAAGGGTAGATAATACAGTTCCTACTTGTAACTCAGGCCCCAGCT  
 GTGCAGCCACTACAGATCCGACCAGGAGTTCTTTCTCAGACGTGGTCTGGTAGAACACAG  
 CAGATGCTGGTGCCTGCCTGGCAACAGGTGACACCCCTGGCTCCTGCTACTACTACACTA  
 ACTTCTGAGAGTGTGGCTGGTTCACACAGGCTTGGAGACTGGGGGAAGATGATTTTCATGC  
 AGCAATCATTATAACTCAGTGATGCCGCAGCCTCTTCTGACCAATCAGATAACTTTATCT  
 GCCCCTCAGCCAGTTAGTGTGGGATTGCACATGTTGTCTGGCCTCAGCCTGCCACTACC  
 AAGAAAAATAAACAGTGCCAGAACAGGAGTAATTCATTACAGAATACCAATATCCCACAT  
 TCAGCATTATTTCTCCAAGATAATTAATGGGAAAGATGTCGAGGAAGTAAGTTGTATA  
 GAAACACAGGACAATCAGAACTCAGAAGGAGAGGCAAGAAATTGCTGTGAAACATCTATC  
 AGACAGGACTCTGATTCATCAGTTTCAGACAAAACAGCGGCAAACCATCATTATTGCCGAC  
 TCCCCGAGTCTGCAGTGAGTGTACTATCAGCAGTGACACTGATGAGGAAGAGACT  
 TCCCAGAGACATTCAGTCAAGAGATGTAAGGTAGTCTAGATTGTGAAGCTTGCCAGAGC  
 ACTTTGAATATTGATCGGATGTGTTTCAATTAAGTAGTCTGATAGTACTCTGAGTACCAGC  
 TCCTCAGGGCAGTCCAGCCCATCCCCTGCAAGAGACCGAATAGTATGTCAGATGAAGAG  
 CAAGAAAGTAGTTGTGATACGGTGGATGGCTCTCCGACATCTGACTCTTCCGGGCATGAC  
 AGTCCATTTGCAGAGAGCACTTTTGTGGAGGACACTCATGAAAACACAGAATTGGTATCC  
 TCTGCTGACACAGAAACCAAGCCAGCTGTCTGTTCTGTTGTGGTGCCACCAGTGGAACATA  
 GAAAATGGCTTAAATGCCGATGAGCATATGGCAAACACAGATTCTATATGCCAGCCATTA  
 ATAAAAGGACGATCTGCCCTGGAAGATTAACCAGCCTTCTGCAGTGGGTAAGTCTGTCAG  
 CAAAAATTGACATCAGCATTCCAGCAGCAGCATTGAACTTCAGTCAGGTTTCAGCACTTT  
 GGATCTGGGCATCAAGAGTGGAATGGAACTTTGGGCACAGAAGACAGCAAGCTTATATT  
 CCTACTAGTGTACCAGTAATCCATTCCTCTTTCTCATGGAAGTCCCAATCACACAGCA  
 GTGCATGCCACCTGGCTGGAAATACACACCTCGGAGGACAGCCTACTCTACTTCCATAC  
 CCATCATCAGCCACCCTCAGTAGTGTGCACCAGTGGCCACCTGTTAGCCTCTCCGTGT  
 ACCTCAAGACCTATGTTACAGCATCCAACTTATAATATCTCCCATCCCAGTGGCATAGTT  
 CACCAAGTCCCAGTGGGCTTAAATCCCCGTCTGTTACCATCCCCAACCATTCATCAGACT  
 CAGTACAAACCAATCTTCCCACCACATTCTTACATTGCAGCATCACCTGCATATACTGGA  
 TTTCCACTGAGTCCAACAAAACCTCAGCCAGTATCCATATATGTGA

Clone variation with respect to AF305239.1  
 207 g=>t;1880 g=>a;3379 a=>c

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for AF305239 unedited TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGAAGATGAGGGAGAC GGGCCCGCGCTTAGCAGCCAGAGCAGCAGCAGCAGCAGCGGTGGGGGAGGGTGT TCGCCGTTTCTCTCAGCCGCCAGGACAAGATGGCAGCGGCCGCGAGAGGGGCTGAGCC CGGGCTGGGTGGTGCCGCTGCTGAAGCGCTGGCTCCCGGTCCCGGCACGGCCCTGCG CCCCACCCCGACATGCTCAGGGCTGCGGCCGCCGAAGAGGAGAGAGCGCGGCCCTA GGAAGGTATGGCCTCACAAGTCTTGGTCTACCCACCATATGTTTATCAAACCTCAGTCAAG TGCCTTTTGTAGTGTGAAGAACTCAAAGTAGAGCCAAGCAGTTGTATTCCAGGAAAG AAACTATCCACGACCTATGTGAATGGTAGAACTTTGAAATTCTCATCTCCCACTAA GGGTAGTGCTTTTCAGACAAAGATACCATTTAATAGACCTCGAGGACACAACCTTTTCATT GCAGACAAGTGTGTTGTTTGAACAACTGCANGTGTACAAAGGTCATAGCAGCTCA GGCACAGCAAGCTCACGTGCAGGCACCTCAGATTGGGGCGTGGCGAAACAGATTGCATTT CCTAGAAGGCCCCACGATGTGGATTGAAGCGCNAGAGTGAGGAGTTGGATAATCATAG CAGCGCAATGCAGATTGTCGATGAATGTCCATACTTTCCTGCATGGTCAAACCATAGG GAAANTCAGTGACAGTTGTGACAGCTACCACAGGATCAAACAGAATTGTACCACTGGNA GAAGGTGACTATCAGTTAGTACAGCATGAAGTCTTATGCTCCATGAAAAATACTACGAAG TCCTTGATTNNTCTGGGTCGAGCACGTTTGGCCAGTAGTTAAAAATGCTGAAAGAGGNA CANNATGAATTGTGCN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	AF305239
<b>Insert Size:</b>	4700 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">AF305239.1</a></u> , <u><a href="#">AAG25990.1</a></u>
<b>RefSeq Size:</b>	4356 bp
<b>RefSeq ORF:</b>	4356 bp
<b>Locus ID:</b>	10114
<b>Cytogenetics:</b>	11p13
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transcription Factors

**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]