

## Product datasheet for **MR226269**

### Hic1 (NM\_001098203) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hic1 (NM_001098203) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hic1
Synonyms:	AA408311; HIC-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226269 representing NM\_001098203  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACTTTTCTGAAGCGGACATTTTACTTAAATCGGGAGAGTGTGCTGGCAGACGATGCTGGACACGA  
 TGGAGGCGCTTGCCATTCGAGGCAGCTACTGCTGCAGCTCAACAATCAGCGCACCAAGGGCTTCTTG  
 CGACGTGATCATCGTGGTGCAGAATGCCCTCTCCGCGCGCACAAAGAACGTGCTGGCGGCCAGCAGCGCC  
 TACCTCAAGTCCCTGGTGGTGCATGACAACCTGCTAAACCTGGACCATGACATGGTGAAGCCGGCGGT  
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 GCGGCGGGGCTACGCTCCTACGGGCGGCCCGGGGCTTGAGGGCTGCCACGCCGTCATCCAGGC  
 TTGCTACTCGTCCCGGGCGGGCCACCGCCGCGCTGCCGCGAGCCGCGTGGGGCCCGATGCAGCC  
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 CCTTACCGCTGGATGAAGCAGGAGCCAGGCTGGGTAGTTATGGCGATGAAGTGGTCCGGGATCGAGGC  
 TCCCGGGTGAAGCCTGGAGGAGCGCGGTGGGATCTGCCGCTCACCCGGGGCCCCCGCTGGGC  
 TGGTACCCCGCCACGCTACCCCGGAGCCTGGACGGGACAGGCACAGGAGCAGACGGCGAGCTATAA  
 GAGCAGCAGCGAGGAGACCGGTAGCAGCGAAGACCCAGCCACCCGCGGCCACCTGGAGGGCTACCCA  
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 CACGCACTTCTGCACGACCCCAAGGTGGCGCTGGAGAGCCTCTACCCGCTGGCTAAATCACTGCTGAG  
 CTAGGACTCAGCCAGACAAGGCGGAGAGGTGCTGAGCCAGGTTGCGCACTTGGCCGAGGACCGGACA  
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**AGCGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR226269 representing NM\_001098203  
 Red=Cloning site Green=Tags(s)

```
MTFPEADILLKSGECAGQTM LDTMEAPGHSRQLLLQLNNQRTKGFLCDV IIVVQNALFRAHKNVLAASSA
YLKSLVVHDNLLNL DHD MVSPAVFRLV LDFIYTGRLTDSVEAAAAA VAPGAEPSL GAVLAAASYLQIPD
LVALCKRRLKRHGKYCHLRGGSGGGGYAPYGRPGRGLRAATPVIQACYS SPAGPPPPAAEPPSGPDAA
VNTHCAELYASGP GPAASL CAPERRCSPLCGLDL SKKSPPGSSVPERPLSERELPPRPD SPPGAGPAVYK
EPSLALPPLPPLPFQKLEEA VPTDPDFRGSGGSPGPEPPGRPDGSSLLYRWMKHEPGLGSYGD ELVRDRG
SPGERLEERGGDPAASPGGP LGLVPPPRYPGSLDGP GTGADGDDYKSSSEETGSSEDP SPPGGHLEGYP
CPHLAYGEPESFGDNL YVCIPCGKGFPSSEQLNAHVEAHVEEEEA LYGRAEAAEVAAGAAGL GPPFGGGG
DKVTGAPGGLGELLRPYRCASCDKSYKDPATLRQHEKTHWLTRPYPCTICGK KFTQRGTMRHMRSHLGL
KPFACDACGMRFTROYRLTEH MRIHSGEKPYECQVCGGKFAQQRNLI SHMKMHAVGGAAGAAGALAGLGG
LPGVPGPDGKGKLD FPEGVFAVARL TAEQLSLKQQDKAAAELLAQTTHFLHDPKVALES LYPLAKFTA E
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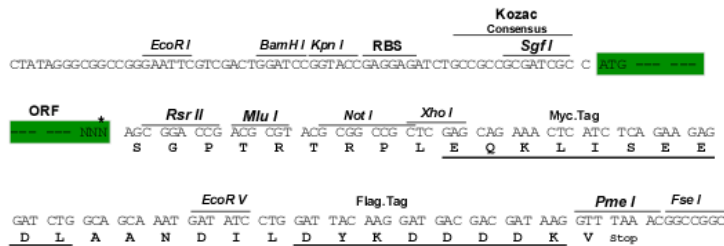
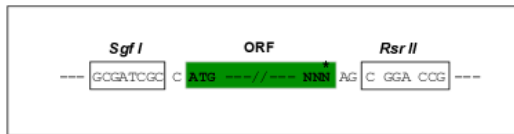
SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9049\\_e07.zip](https://cdn.origene.com/chromatograms/mm9049_e07.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



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

**ACCN:** NM\_001098203

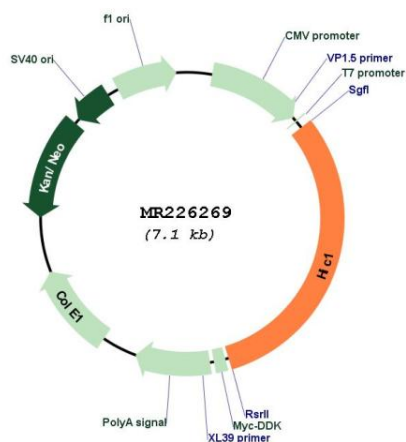
**ORF Size:** 2199 bp

**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.

<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>NM_001098203.1, NP_001091673.1</u>
<b>RefSeq Size:</b>	3253 bp
<b>RefSeq ORF:</b>	2202 bp
<b>Locus ID:</b>	15248
<b>UniProt ID:</b>	<u>Q9R1Y5</u>
<b>Cytogenetics:</b>	11 45.76 cM
<b>MW:</b>	77.3 kDa
<b>Gene Summary:</b>	Transcriptional repressor. Recognizes and binds to the consensus sequence '5-[CG]NG[CG]GGGCA[CA]CC-3'. May act as a tumor suppressor. May be involved in development of head, face, limbs and ventral body wall. Involved in down-regulation of SIRT1 and thereby is involved in regulation of p53/TP53-dependent apoptotic DNA-damage responses. The specific target gene promoter association seems to be depend on corepressors, such as CTBP1 or CTBP2 and MTA1. The regulation of SIRT1 transcription in response to nutrient deprivation seems to involve CTBP1. In cooperation with MTA1 (indicative for an association with the NuRD complex) represses transcription from CCND1/cyclin-D1 and CDKN1C/p57Kip2 specifically in quiescent cells. Involved in regulation of the Wnt signaling pathway probably by association with TCF7L2 and preventing TCF7L2 and CTNNB1 association with promoters of TCF-responsive genes. Seems to repress transcription from E2F1 and ATOH1 which involves ARID1A, indicative for the participation of a distinct SWI/SNF-type chromatin-remodeling complex. Probably represses transcription from ACKR3, FGFBP1 and EFNA1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226269