

## Product datasheet for **MC222411**

### **Hic1 (NM\_010430) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Hic1 (NM_010430) Mouse Untagged Clone
Tag:	Tag Free
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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Fully Sequenced ORF: >MC222411 representing NM\_010430  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATTACAAGAATGCGCCACCATCCCTGGCTTAAGATTCTCATTGGAAGACAGAACCTTCCCCTCCC  
 CCCCCCGAATTGGCGCATATAACATATAAATATGTAAGTACTCGGGAGCACTCAGCACAAAACCCAGGTT  
 TATGGGACTCCCAGTCCGATATCTGAGTCTCCAGGTGGGCACATCTGGAAGCGCGCAACCTGCAAGAT  
 CTGCTCAGCTCCGCATCTGCAAGCCTCTTGGCCAGGTGTGCGCCAGAGGTGCGAGCCAGCCGCACACA  
 GTCCCCGCGTGGCCGCGAGGTGGCGCCATGGCCGCGCAGCGTCTGCCGTTTCGGCCGCTCCAGATAAG  
 AGTGTGCGAAAGCGCGGAGGGGCTGAGACGCGACCAGGACGCGGGGAGGACGGACCAGGCAAGACAGACC  
 GACCGGGGCCCCGCGGGGAGGGCAGCGCACTGCAGCCACGTCCCCCTGGATCCGCCGCGAGCCGG  
 GCCCGGGCTCCGACATGCCCCAGGAGAGTGTGCTGGCAGACGATGCTGGACAGATGGAGGGCC  
 TGGCCATTGAGGCGACTACTGTGCACTCAACAATCAGCGCACCAAGGGCTTCTGTGCGACGTGATC  
 ATCGTGGTGCAGAATGCCCTCTTCGCGCGCACAGAAGCTGCTGGCGGCCAGCAGCGCCTACCTCAAGT  
 CCCTGGTGGTGCATGACAACCTGCTAAACCTGGACCATGACATGGTGGAGCCCGGCGTGTCCGCTGGT  
 GCTGGACTTACCTACACCGCCGCTGACTGACAGTGTGAGGCCGAGCAGCAGCAGCGGTGGCCCCG  
 GGCGCGGAGCCGAGCCTGGGCGCTGTGCTGGTGTGCGAGTACCTGCAGATCCCTGACCTCGTGGCTC  
 TGTGCAAGAAGCGCTCAAACGCCACGGCAAGTACTGCCACCTGCGGGGAGGAGGAGCGGGCGGGCGG  
 CTACGCTCCTACGGGCGCCCGCCGGGGCTTGGGGTGCACGCCGTATCCAGGCTTGTACTCG  
 TCCCGGGCGGGCCACCGCCCGCTGCCGCCGAGCCGCGTGGGGCCCGATGCAGCCGTCAACACCC  
 ACTCGCTGAGCTATATGCTTCAAGCCCGGGCCAGCAGCCTACTCTGCGCCCGGAGCGTCTGCTGCT  
 CCGCTTTGCGGCTGGATCTGTCCAAGAAGAGCCCGCCAGGTTCTCGTCCCGAGCGACCGCTTAGT  
 GAGCGGAACTGCCTCCACGCCGATAGCCCTCCCGGTGCGGGGCCGAGTCTACAAGGAGCCATCAC  
 TCGCCCTGCCCGCTGCCGCTTTGCCCTTCCAAAAGCTGGAGGAGGCCGTACCGACTCCAGACCCGTT  
 TCGAGGAAGCGGTGGCAGTCCGGGACCCGAGCCCCCGCGCCCGGAGCCTCCAGCCTCCTTACCGC  
 TGGATGAAGCAGCAGCCAGGCTGGTATGATGGCGATGAACTGGTCCGGGATCGAGGCTCCCCGGGTG  
 AGCGCTGGAGGAGCGCGGTGGGATCCTGCCGCTCACCGGGGCCCCCGCTGGGCTGGTACCCCC  
 GCCACGCTACCCGGGAGCCTGGACGGCCAGGCACAGGAGCAGACGGCAGCATAAAGAGCAGCAGC  
 GAGGAGACCGGTAGCAGCGAAGACCCAGCCACCCGGCGCCACCTGGAGGGCTACCATGCCCGCACT  
 TGGCTTATGGTGAAGCCTGAGAGCTTTGGTGAACCTGTACGTGTGCATCCCATGTGGCAAAGGCTCCC  
 CAGCTCGGAACAGCTGAATGCACACGTGGAGGCTCACGTAGAGGAAGAAGAGGCGTTATATGGCAGGGCA  
 GAGGCTGCTGAGGTGGTGTGCTGGGGCCCGCCGCTTGGGCCCCCTTTGGTGGCGGTGGGGACAAGGTCA  
 CTGGGGCGCCGGGCGGACTAGGAGAGTGTGCGGCCATACCGCTGCGCGTCTGCGACAAGAGTACAA  
 GGACCCGGCCACGCTGAGGCAGCAGAGAAGACACACTGGTGAAGGCCCTATCCGTGTACCATCTGC  
 GGAAAGAAGTTCACGCAACGCGGAACCATGACACGCCATATGCGCAGCCACTTGGGCTGAAGCCCTTTC  
 CGTGCGACGCGTGGCATGCGCTTACCCGCCAGTATCGCCTCACGGAGCAGTGGCATCCACTCTGG  
 AGAGAAGCCCTACGAGTCCAGGTGTGCGGTGGCAAGTTTGTCAACAGCGCAACCTCATCAGCCATATG  
 AAGATGCACGCTGTAGGTGGCGCGCCGGCGCGCCGGGCGTGGCTGGCCTGGGGGACTACCTGGCG  
 TCCTGGCCCTGACGGCAAGGGCAAGCTCGACTTCCCTGAGGGTGTCTTTGCTGTGGCCCGCTCACAGC  
 TGAACAGCTGAGTCTGAAGCAGCAGGACAAGGCAGCTGCTGCCGAGTGTGGCGCAGACCAGCACTTC  
 CTGCACGACCCCAAGGTGGCGTGGAGAGCCTTACCCGCTGGCTAAATTCAGTGTGAGCTAGGACTCA  
 GCCCAGACAAGGCGGAGAGGTGCTGAGCCAGGTGCGCACTTGGCCGAGGACCGGACAGCCGAACCAT  
 CGACCGTTTCTCCACC**TAG**

AC**GGGCCG**CTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA  
 TTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-NotI  
 ACCN: NM\_010430

<b>Insert Size:</b>	2682 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<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>	<a href="#">NM_010430.2</a> , <a href="#">NP_034560.2</a>
<b>RefSeq Size:</b>	4247 bp
<b>RefSeq ORF:</b>	2682 bp
<b>Locus ID:</b>	15248
<b>Cytogenetics:</b>	11 45.76 cM

**Gene Summary:**

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]

Transcript Variant: This variant (1) encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.