

## Product datasheet for **MR208357**

### **Kat7 (NM\_177619) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kat7 (NM_177619) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kat7
Synonyms:	Hbo1; Hboa; Myst2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208357 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCCGAAGGAAGAGAAATGCAGGCAGTAGTTCAGATGGAACCGAAGATTCCGATTTTCTACAGATC  
 TCGAGCATACAGACAGTTCAGAGAGTGATGGCACCTCGCGCCGATCTGCCCGAGTCACCCGCTCCTCAGC  
 CAGGCTAAGCCAGAGTTCCTCAAGAACTAAAAATACAGCTGATCATGATGAGTCACCACCTCGAACTCCA  
 ACCGGAATGCACCTTCTCTGAGTCTGACATAGACATCTCCAGCCCAACGTGTCTCATGATGAGAGCA  
 TTGCCAAGGACATGTCCCTGAAGGACTCAGGCAGTGATCTCTCACCCTCCCAAGCGACGTGATTTCA  
 CGAAAGCTACAATTTCAACATGAAGTGTCTACGCCGGGCTGCAACTCTCTAGGACATCTTACAGGAAAG  
 CACGAGAGACATTTCTCCATCTCAGGATGCCCGTGTATCATAACCTCTCAGCTGACGAATGCAAGGCAC  
 CAACAGAGAGACAGCTGCGGTATAAGGAAAAGGTGGCTGAACTCAGGAAGAAAAGAAATCTGGACTGAG  
 CAAAGAGCAGAAGGAGAAATACATGGAACACAGACAGACCTATGGGAACACTCGGGAGCCTCTCTGGAA  
 AACCTGACAAGTGAATATGACTTAGATCTTTCCGAAGAGCACAAGCCCGGGCTTCTGAGGATTTGGAGA  
 AGTTAAGGCTTCAAGCCAAATCACAGAGGGAAGCAACATGATTAACAAATGCTTTTGGCCGCTATGA  
 ACTGGACACTTGGTACCACTCTCCCTATCCTGAGGAATATGCGAGGCTGGGACGTCTCTACATGTGTGAA  
 TTCTGCTTAAAGTACATGAAGAGCCAGACAATCTCCGCCGACACATGGCCAAGTGTGTGTGAAACACC  
 CCCCTGGTGATGAGATTTATCGCAAAGGCTCCATCTCTGTGTTTGAAGTAGACGGCAAGAAGAACAAGAT  
 CTACTGCCAAAACCTCTGCCTTTTGGCAAAGCTTTTCTGGACCATAAGACGCTATACTATGATGTAGAA  
 CCTTTCTGTTCTACGTTATGACAGAAGCGGACAATACTGGCTGCATCTGATTGGATATTTTCTAAGG  
 AGAAGAATTCATTTCTCAACTATAATGTCTCGTGCATCCTCACCATGCCTCAGTACATGGACAGGGCTA  
 CGGGAAGATGCTGATCGATTTTCAGTTATTTACTTTCAAAGTAGAAGAGAAAGTCGGCTCTCCAGAGCGC  
 CCACTGTCAGACCTGGGGCTCATAAGCTACCGCAGCTACTGGAAGGAGGTACTGCTCCGATACCTGCACA  
 ACTTCCAGGGCAAGGAGATCTCCATCAAAGAAATTAGCCAGGAAACAGCTGTGAATCCCCTGGACATTGT  
 CAGCACTCTGCAAGCCCTCAGATGCTCAAGTATTGGAAGGCAAGCACCTAGTTTTAAAGAGACAGGAC  
 CTGATAGATGAGTGGATAGCCAAAGAGGCCAAAAGGTCCAACCTCAACAAAACCATGGATCCAAGCTGCT  
 TAAATGGACCCCTCCCAAGGGCACT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208357 protein sequence  
 Red=Cloning site Green=Tags(s)

MPRRKRNAGSSSDGTEDSDFSTDLEHTDSESDGTSRRSARVTRSSARLSQSSQETKNTADHDESPRPT  
 TGNAPSESDIDISSPNVSHDEIAKDMSLKDSGSDLSHRPKRRRFHESYNFMKPTPGNSLGHLTGK  
 HERHFSISGCPLYHNLSADECKAPTERQLRYKEKVAELRKKRNSGLSKEQKEKMEHRQTYGNTRPLLE  
 NLTSEYDLDFRRAQARASEDLKRLRQGITEGSNMIKTIAFGRYELDTWYHSPYEEYARLGRLYMCE  
 FCLKYMKSQITLRRHMAKCVWKHPPGDEIYRKGSISVFEVDGKKNKIYQNLCLLAKLFLDHKTLYYDVE  
 PFLFYVMTEADNTGCHLIGYFSKEKNSFLNYNVSCILTMPQYMRQGYGKMLIDFSYLLSKVEEKVGSPER  
 PLSDLGLISYRSYWKVLLRYLHNFQGEISIKEISQETAVNPVDIVSTLQALQMLKYWKGKHLVLKRQD  
 LIDEWIAKEAKRSNSNKTMDPSCLKWTPPKGT

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_177619

**ORF Size:** 1569 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\\_177619.3](#)

**RefSeq Size:** 5699 bp

**RefSeq ORF:** 1569 bp

**Locus ID:** 217127

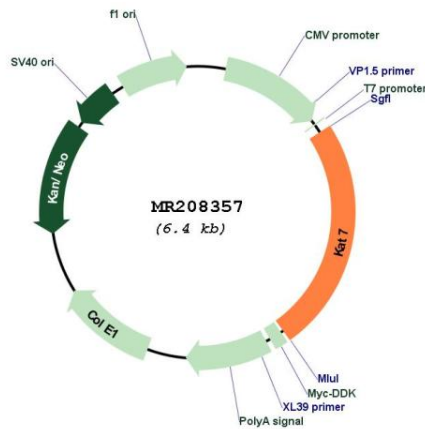
**UniProt ID:** [Q5SVQ0](#)

**Cytogenetics:** 11 D

**MW:** 60.3 kDa

**Gene Summary:** Component of the HBO1 complex which has a histone H4-specific acetyltransferase activity, a reduced activity toward histone H3 and is responsible for the bulk of histone H4 acetylation in vivo. Involved in H3K14 (histone H3 lysine 14) acetylation and cell proliferation (PubMed:23319590). Through chromatin acetylation it may regulate DNA replication and act as a coactivator of TP53-dependent transcription. Acts as a coactivator of the licensing factor CDT1. Specifically represses AR-mediated transcription.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208357