

## Product datasheet for **RG234485**

### **KAT7 (NM\_001199155) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KAT7 (NM_001199155) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KAT7
Synonyms:	HBO1; HBOA; MYST2; ZC2HC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234485 representing NM\_001199155  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCCGAAGGAAGAGGAATGCAGGCAGTAGTTCAGATGGAACCGAAGATTCCGATTTTTCTACAGATC  
 TCGAGCACACAGACAGTTCAGAAAGTGATGGCACATCCCGACGATCTGCTCGAGTACCCCGCTCCTCAGC  
 CAGGCTAAGCCAGAGTTCTCAAGATTCCAGTCTGTTTCGAAATCTGCAGTCTTTTGGCACTGAGGAGCCT  
 GCTTACTCTACCAGAAGAGTGACCCGTAGTCAGCAGCAGCTACCCAGTGACACCGAAAAATACCCTC  
 TTCGGCAGACTCGTTCATCTGGTTCAGAAACTGAGCAAGTGGTTGATTTTTAGATAGAGAACTAAAAA  
 TACAGCTGATCATGATGAGTCACCGCTCGAACTCCAACGGAAATGCGCCTTCTCTGAGTCTGACATA  
 GACATCTCCAGCCCAATGTATCTCAGATGAGAGCATTGCCAAGGACATGTCCCTGAAGGACTCAGGCA  
 GTGATCTCTCATCGCCCAAGCGCCGTCGTTCCATGAAAGCTACAACCTCAATATGAAGTGTCTAC  
 ACCAGGCTGTAACCTCTAGGACACCTACAGGAAAACATGAGAGACATTTCTCCATCTCAGGATGCCCA  
 CTGTATCATAACCTCTCAGCTGACGAATGCAAGGCACCAACGGAGAGGCAGCTTCGATATAAGGAAAAAG  
 TGGCTGAACTCAGGAAGAAAAGAAATCTGGACTGAGCAAAGAACAGAAAGAGAAATATATGGAACACAG  
 ACAGACCTATGGGAACACACGGGAACCTTTTTAGAAAACCTGACAAGCGAGTATGACTTGGATCTTTTC  
 CGAAGAGCACAAGCCCGGCTTCAGAGGATTTGGAGAAGTTAAGGCTGCAAGGCCAAATCACAGAGGGAA  
 GCAACATGATTAACAATTGCTTTTGGCCGCTATGAGCTTGATACCTGGTATCATTCTCCATATCCTGA  
 AGAATATGCACGGCTGGGACGTCTATATGTGTGAATTCTGTTAAAAATATGAAGAGCCAAACGATA  
 CTCCCGGCACATGGCCAAATGTGTGTGAAACACCCACCTGGTATGAGATATATCGCAAAGGTTCAA  
 TCTCTGTGTTTGAAGTGGATGGCAAGAAAACAGATCTACTGCCAAAACCTGTGCTGTGGCCAACT  
 TTTTCTGGACCACAAGACATTATATTATGATGTGGAGCCCTTCTGTTCTATGTTATGACAGAGGCGGAC  
 AACACTGGCTGTACCTGATTGGATATTTTTCTAAGGAAAAGAATTCATTCTCACTACACGCTCTCCT  
 GTATCCTTACTATGCCTCAGTACATGAGACAGGCTATGGCAAGATGCTTATTGATTTTCAGTTATTTGCT  
 TTCCAAAGTCGAAGAAAAGTTGGCTCCCGAAGCTCCACTCTCAGATCTGGGGCTTAAAGCTATCGC  
 AGTTACTGGAAGAGTACTTCTCCGCTACCTGCATAATTTTCAAGGCAAAGAGATTTCTATCAAAGAAA  
 TCAGTCAGGAGACGGCTGTGAATCCTGTGGACATTGTCAGCACTCTGCAAGCCCTCAGATGCTCAAATA  
 CTGGAAGGAAAACACCTAGTTTTAAAGAGACAGGACCTGATTGATGAGTGGATAGCCAAAGAGGCCAAA  
 AGGTCCAACCTCAATAAAACCATGGATCCAGCTGCTTAAATGGACCCCTCCAAAGGGCACT

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>RG234485 representing NM\_001199155  
 Red=Cloning site Green=Tags(s)

MPRRKRNAGSSSDGTEDSDFSTDLEHTDSSESDGTSRRSARVTRSSARLSQSSQDSSPVRNLQSFQTEEP  
 AYSTRRVTRSQQPTVPVTPKKYPLRQTRSSGSETEQVVDFSDRETKNADHDESPRPTPGNAPSSSESDI  
 DISSPNVSHDEIAKMSLKDSDLSHRPKRRRFHESYNFMKCPGPNLGHLLTGKHERHFSISGCP  
 LYHNLSADECKAPTERQLRYKEKVAELRKRNSGLSKEQKEKYMHRQTYGNTREPLENLTSEYDLDF  
 RRAQARASEDLEKRLRQGITEGSNMIKTIAGFRYELDTWYHSPYPEYARLGRLYMCEFLKYMKSQTI  
 LRRHMAKCVWKHPPGDEIYRKGSISVFEVDGKKNKIYQNLCLLAKLFLDHKTLYYDVEPFLFYVMTEAD  
 NTGCHLIGYFSKEKNSFLNYNVSCILTMPQYMRQGYGKMLIDFSYLLSKVEEKVGSPEPLSDLGLISYR  
 SYWKEVLLRHLNHFQGKEISIKEISQETAVNPVDIVSTLQALQMLKYWKGKHLVLRQDLIDEWIAKEAK  
 RSNSNKTMDPSCCLKWTPPKGT

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001199155

**ORF Size:** 1743 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\\_001199155.1](#), [NP\\_001186084.1](#)

**RefSeq Size:** 3574 bp

**RefSeq ORF:** 1746 bp

**Locus ID:** 11143

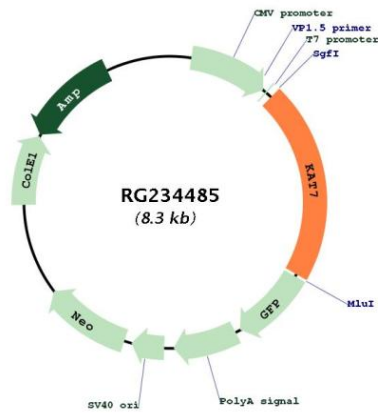
**UniProt ID:** [O95251](#)

**Cytogenetics:** 17q21.33

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Gene Summary:** The protein encoded by this gene is part of the multimeric HBO1 complex, which possesses histone H4-specific acetyltransferase activity. This activity is required for functional replication origins and is involved in transcriptional activation of some genes. In both cases, the acetylation of histone H4 helps unfold chromatin so that the DNA can be accessed and replicated or transcribed. [provided by RefSeq, Oct 2016]

**Product images:**



Circular map for RG234485