

Product datasheet for **MG225421**

Kat7 (NM_001195003) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kat7 (NM_001195003) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kat7
Synonyms:	Hbo1; Hboa; Myst2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG225421 representing NM_001195003
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCCGAAGGAAGAGAAATGCAGGCAGTAGTTCAGATGGAACCGAAGATTCCGATTTTTCTACAGATC
 TCGAGCATACAGACAGTTCAGAGAGTGATGGCACCTCGCGCCGATCTGCCCGAGTCACCCGCTCCTCAGC
 CAGGCTAAGCCAGAGTTCCTCAAGATTCCAGCCCTGTTTCGAAATTTGCCGCTTTTCGGCACTGAGGAGCCT
 GCCTATTCTACCAGAAGGGTGACCCGTAGTCAGCAGCAGCCACGCCAGTGACTCCAAAAAGTACCCTC
 TTCGACAGACTCGCTCATCTGGCTCTGAAACGGAGCAGGTGGTGGACTTTTCAGATAGAGAACTAAAAA
 TACAGCTGATCATGATGAGTCACCACCTCGAACTCCAACCGAAATGCACCTTCTCTGAGTCTGACATA
 GACATCTCCAGCCCCACGTGTCTCATGATGAGAGCATTGCCAAGGACATGTCCCTGAAGGACTCAGGCA
 GTGATCTCTCACCGTCCAAGCGACGTGATTTACGAAAGCTACAATTTCAACATGAAGTGTCTAC
 GCCGGGCTGCAACTCTTAGGACATCTACAGGAAAGCAGAGAGACATTTCTCCATCTCAGGATGCCCCG
 CTGTATACATAACCTCTCAGCTGACGAATGCAAGGTGAGAGCACAGAGCCGGGATAAGCAGATAGAAGAAA
 GGATGCTGTCCCACAGGCAAGATGACAACAACAGGCATGCAACCAGGCACCAGGCAACAACAGAGAGACA
 GCTGCGGTATAAGGAAAAGGTGGCTGAACTCAGGAAAGAAAAGAAATTCGGACTGAGCAAAGAGCAGAAG
 GAGAAATACATGGAACACAGACAGACCTATGGAAACACTCGGGAGCCTCTCTGGAAAACCTGACAAAGT
 AATATGACTTAGATCTTTTCCGAAGAGCACAAGCCCGGGCTTCTGAGGATTTGGAGAAGTTAAGGCTTCA
 AGGCCAAATCACAGAGGGAAGCAACATGATTAACAATTGCTTTTGGCCGCTATGAACTGGACACTTGG
 TACCACCTCCCTATCCTGAGGAATATGCGAGGCTGGGACGTCTACATGTGTGAATTCGCTTAAAGT
 ACATGAAGAGCCAGACAATCCTCCGCCACACATGGCCAAGTGTGTGTGGAACACCCCTGTTGATGA
 GATTTATCGCAAAGGCTCCATCTCTGTGTTTGAAGTAGACGGCAAGAAGAACAAGATCTACTGCCAAAAC
 CTCTGCCTTTTGGCAAAGCTTTTCTGGACCATAAGACGCTATACTATGATGTAGAACCTTTCTGTTCT
 ACGTTATGACAGAAGCGGACAATACTGGCTGTCATCTGATTGGATATTTTCTAAGGAGAAGAATTCATT
 TCTCAACTATAATGTCTCGTGCATCCTCACCATGCCTCAGTACATGCGACAGGGCTACGGGAAGATGCTG
 ATCGATTTTCAAGTATTTACTTTCCAAAGTAGAAGAGAAAGTGGCTCTCCAGAGCGCCACTGTCAGACC
 TGGGGCTCATAAGCTACCGCAGCTACTGGAAGGAGGTACTGCTCCGATACCTGCACAACCTCCAGGGCAA
 GGAGATCTCCATCAAAGAAATTAGCCAGGAAACAGCTGTGAATCCCGTGGACATTGTCAGCACTCTGCAA
 GCCCTTCAGATGCTCAAGTATTGAAAGGCAAGCACCTAGTTTTAAAGAGACAGGACCTGATAGATGAGT
 GGATAGCCAAAGAGGCCAAAAGTCCAACCTCAACAAAACCATGGATCCAAGCTGCTTAAATGGACCCC
 TCCAAGGGCACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225421 representing NM_001195003
 Red=Cloning site Green=Tags(s)

MPRRKRNAGSSSDGTEDSDFSTDLEHTDSESDGTSRRSARVTRSSARLSQSSQDSSPVRNLPSTGTEEP
 AYSTRVRSQQPTPVTPKYPKYLRLQTRSSGSETEQVVDFSDRETKNTADHDESPRPTGNAPSSSESDI
 DISSPNVSHDESIKDMSLKDSGSDLHRPKRRRFHESYNFMKCPTPGCNSLGHLTGKHERHFSISGCP
 LYHNLSADECKVRAQSRDKQIEERMLSHRQDDNRRHATRHPQTERQLRYKEKVAELRKKRNSGLSKEQK
 EKMEHRQTYGNTREPLENLTSEYDLDFRRAQARASEDLKLRQQQITEGSNMIKTIAFGRYELDTW
 YHSPYPPEYARLGRLYMCEFLKYMKSQTLRRHMAKCVWKHPPGDEIYRKGSISVFEVDGKKNKIYQCN
 LCLLAKLFLDHKTLYYDVEPFLFYVMTEADNTGCHLIGYFSKEKNSFLNYNVSCILTMPQYMRQGYGKML
 IDFSYLLSKVEEKVGSPEPRLSDLGLISYRSYWEVLLRYLHNFQGKEISIKEISQETAVNPVDIVSTLQ
 ALQMLKYWKGHLLVLRQDLIDEWIAKEAKRSNSNKTMDPSCCLKWTPPKGT

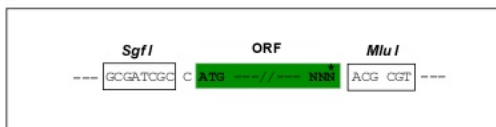
TRTRPLE - GFP Tag - V

Restriction Sites:

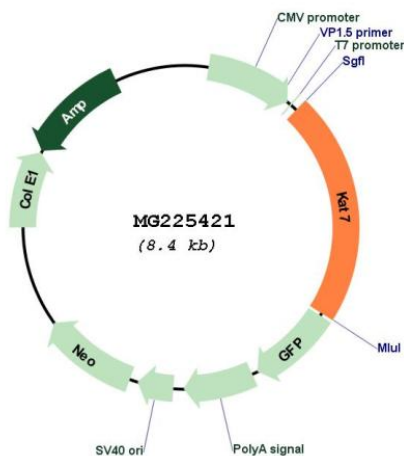
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001195003
 ORF Size: 1833 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:	<ol style="list-style-type: none">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_001195003.1 , NP_001181932.1
RefSeq Size:	5966 bp
RefSeq ORF:	1836 bp
Locus ID:	217127
Cytogenetics:	11 D
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]