

Product datasheet for **MG225422**

Kat7 (NM_001195004) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kat7 (NM_001195004) 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)



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ORF Nucleotide Sequence:

>MG225422 representing NM_001195004
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCCGAAGGAAGAGAAATGCAGGCAGTAGTTCAGATGGAACCGAAGATTCCGATTTTTCTACAGATC
 TCGAGCATACAGACAGTTCAGAGAGTGATGGCACCTCGCGCCGATCTGCCCGAGTCACCCGCTCCTCAGC
 CAGGCTAAGCCAGAGTTCCTCAAGATTCCAGCCCTGTTTCAAAATTTGCCGCTTTTCGGCACTGAGGAGCCT
 GCCTATTCTACCAGAAGGGTGACCCGTAGTCAGCAGCAGCCACGCCAGTGACTCCAAAAAGTACCCTC
 TTCGACAGACTCGCTCATCTGGCTCTGAAACGGAGCAGGTGGTGGACTTTTCAGATAGAGAACTAAAAA
 TACAGCTGATCATGATGAGTCACCACCTCGAACTCCAACCGAAATGCACCTTCTCTGAGTCTGACATA
 GACATCTCCAGCCCCAACGTGTCTCATGATGAGAGCATTGCCAAGGACATGTCCCTGAAGGACTCAGGCA
 GTGATCTCTCACCGTCCCAAGCGACGTGATTTACGAAAGCTACAATTTCAACATGAAGTGTCTAC
 GCCGGGCTGCAACTCTTAGGACATCTACAGGAAAGCAGAGAGACATTTCTCCATCTCAGGATGCCCCG
 CTGTATCATAACCTCTCAGCTGACGAATGCAAGGCACCAACAGAGAGACAGCTGCCGTATAAGGAAAAGG
 TGGCTGAACTCAGGAAGAAAAGAAATCTGGACTGAGCAAAGAGCAGAAGGAGAAATACATGGAACACAG
 ACAGACCTATGGGAACACTCGGGAGCCTCTTTGGAAAACCTGACAAGTGAATAGACTTAGATCTTTTC
 CGAAGAGCACAAGCCCGGCTTCTGAGGATTTGGAGAAGTTAAGGCTTCAAGGCCAAATCACAGAGGGAA
 GCAACATGATTAACAATTGCTTTTGGCCGCTATGAACTGGACACTTGGTACCCTCTCCCTATCCTGA
 GGAATATGCGAGGCTGGGACGTCTACATGTGTGAATTTGCTTAAAGTACATGAAGAGCCAGACAATC
 CTCGCGGACACATGGCCAAGTGTGTGGAAACACCCCTGGTATGAGATTTATCGCAAAGGCTCCA
 TCTCTGTGTTTGAAGTAGACGGCAAGAAGAAGATCTACTGCCAAAACCTCTGCCTTTTGGCAAAGCC
 TTTTCTGGACCATAAGACGCTATACTATGATGTAGAACCCTTTCCTGTTCTACGTTATGACAGAAGCGGAC
 AATACTGGCTGTCATCTGATTGGATATTTTTCTAAGGAGAAGAATTCATTTCTCAACTATAATGTCTCGT
 GCATCCTCACCATGCCTCAGTACATGCGACAGGGCTACGGGAAGATGCTGATCGATTTTCAGTTATTTACT
 TTCCAAAGTAGAAGAGAAAGTCGGCTCTCCAGAGCGCCACTGTCAGACCTGGGGCTCATAAGCTACCGC
 AGCTACTGGAAGGAGGTACTGCTCCGATACCTGCACAACCTCCAGGGCAAGGAGATCTCCATCAAAGAAA
 TTAGCCAGGAAACAGCTGTGAATCCCGTGGACATTGTCAGCACTGCAAGCCCTCAGATGCTCAAGTA
 TTGGAAAGGCAAGCACCTAGTTTTAAAGAGACAGGACCTGATAGATGAGTGGATAGCCAAAGAGGCCAAA
 AGGTCCAACCTCAACAAAACCATGGATCCAAGCTGCTTAAATGGACCCCTCCAAGGGCACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225422 representing NM_001195004
 Red=Cloning site Green=Tags(s)

MPRRKRNAGSSSDGTEDSDFSTDLEHTDSESDGTSRRSARVTRSSARLSQSSQDSSPVRNLPSTFGTEEP
 AYSTRRVTRSQQPTVPVTPKKYPLRQTRSSGSETEQVVDFSDRETKNTADHDESPRPTGNAPSSSESDI
 DISSPNVSHDEIAKMSLKDSDLSHRPKRRRFHESYNFMKCPGPNLSLGHLTGKHERHFSISGCP
 LYHNLSADECKAPTERQLRYKEKVAELRKKRNSGLSKEQKEKYMHRQTYGNTREPLLENLTSEYDLDF
 RRAQARASEDLEKLRLLQGQITEGSNMIKTIAFGRYELDTWYHSPYPEYARLGRLYMCEFLKYMKSQTI
 LRRHMAKCVWKHPPGDEIYRKGSISVFEVDGKKNKIYQNLCLLAKPFLDHKTLYYDVEPFLFYVMTEAD
 NTGCHLIGYFSKEKNSFLNYNVSCILTMPQYMRQGYGKMLIDFSYLLSKVEEKVGSPEPLSDLGLISYR
 SYWKEVLLRYLHNFQGKEISIKEISQETA VNPVDIVSTLQALQMLKYWKGKHLVLRQDLIDEWIAKEAK
 RSNKNKTMPSCLKWTPPKGT

TRTRPLE - GFP Tag - V

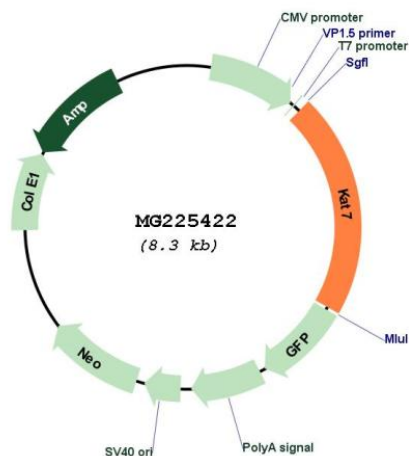
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001195004

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:	<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_001195004.1 , NP_001181933.1
RefSeq Size:	5876 bp
RefSeq ORF:	1746 bp
Locus ID:	217127
UniProt ID:	Q5SVQ0
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]