

## Product datasheet for **MR225908**

### **Kat2b (NM\_001190846) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kat2b (NM_001190846) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kat2b
Synonyms:	A930006P13Rik; AI461839; AW536563; p/CAF; Pcaf
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>MR225908 representing NM\_001190846  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGTCTGAAATGGCAGAGGAGTCTGTAAATGCAATGGCTGGAAGAACCCTAACCCCTCTCCTACTC  
 CACCAAGAGGAGACCTCCAGCAGATAATTGTCAGTTTGACAGAATCCTGTGCGAAGCTGTAGCCATGCCCT  
 TGCTGCTCACGTTTCTCACTTGGAGAATGTGTCAGAGGAAGAGATGGACAGACTCCTGGGAATTGTGTTG  
 GATGTGGAGTACCTTTACCTGCGTCCACAAAGAAGAAGATGCAGATACCAAACAAGTGTACTTCTACC  
 TATTCAAGCTCTTGAGAAAGTCAATTTTACAAAGAGGAAAACCTGTGGTTGAAGGCTCCTTGAGAGAAGAA  
 GCCGCCATTTGAGAAGCCAGTATTGAACAGGGTGTGAACAACCTCGTGCAGTACAAGTTTAGTCACTTG  
 CCATCGAAAGAGAGGCAGACAACGATCGAGCTGGCCAAGATGTTTCTGAACCGCATCACTACTGGCATC  
 TGGAGGCTCCATCTCAGCGGAGACTACGGTCTCCAATGATGACATCTCTGGATAACAAGGAAAACACAC  
 AAGGTGGTTGTGCTACTGCAATGTACCGCAGTTCTGTGACAGCTTACCTCGGTACGAAACCACAAAGGTG  
 TTTGGGAGAACATTGCTTCGCTCGGTCTTACCATCATGAGACGACAGCTTTGGAACAAGCCAGACAGG  
 AAAAAGACAAACTGCCTCTTGAGAAACGACGCTTATCCTCACACATTTCCCAAAGTTTCTGTCCATGTT  
 GGAAGAAGAAGTGTATAGTCAAATTTCTCTATCTGGGATCAGGATTTTCTCTCAGCCTCTTCCAGAACC  
 AGCCCGCTAGGAATCCAAACAGTAATCAGTCTCTGTTACTGGGACAGCATTGTTCAAGTTCAAATTTCCA  
 CTTCCCATGAGCAGATCAATGGAGGGAGAACAAGTCTGGATGCAGAGGCTCTTCTGGGCTTGAAGCAAA  
 CCCGGGAGAAAAGAGGAAAATGAACAACCTCATGCTCCCGAGGAGGCCAAGAGATCTCGAGTGTGGGG  
 GATATTCGCGTGAATTGATCAATGAGGTCATGTCTACCATCACAGACCCTGCAGGGATGCTTGGACCAG  
 AGACCAATTTTCTGTGACGCCATTCGGCCAGAGATGAGGCGGCACGGCTGGAAGAACGACAGGGGTGCAT  
 TGAATTCACGTTGGTGGCAACTCCCTGAACCAGAAAACCAACAAGAAGATCCTGATGTGGCTCGTGGGC  
 CTCCAGAATGTGTTTTCCACCAGCTGCCAGAATGCCAAAGAGTACATCACACGGCTCGTCTTTGACC  
 CGAAACACAAAACCCCTTCTTAAATTAAGATGGCCGTGTCATTGGTGGTATCTGTTTCCGGATGTTTCC  
 ATCCCAGGGATTCACAGAGATTGTTTTCTGTGACGTAACCTCAAATGAACAAGTCAAGGGCTATGGAACC  
 CACCTGATGAACCATCTCAAAGAATACCACATAAAGCAGGAGATCCTCAACTTCTCACATATGCAGATG  
 AGTATGCCATCGGCTATTTCAAGAAGCAGGTTTCTCAAAGAAATCAAATACCTAAAACCAAATATGT  
 TGGCTACATCAAGGATTATGAAGGGGCCACTTTGATGGGATGTGAGCTGAACCCTCAGATCCCATACACA  
 GAGTTCTGTGTCATTAATAAAGCAGAAGGAGATCATAAAGCTGATAGAAAGAAAACAAGCCAGAA  
 TTCGAAAAGTCTACCCTGGACTTTCTGTGTTTCAAAGATGGAGTTCGGCAGATTCCATAGAAAGCATTCC  
 TGGAAATCAGAGAGACAGGCTGGAACAAGTGGAAAAGAGAAAAGTAAAGAGCCCAAAGACCTGAGCAG  
 CTTTACAGCACCTCAAGAACATCCTGCAGCAGGTGAAGAACCATCCAAATGCTTGGCCTTTTATGGAAC  
 CAGTGAAGAGAACAGAAGCTCCGGGATATTATGAAGTTATAAGGTTCCCATGGATCTGAAAACCATGAG  
 TGAACGCCTCAGGAACAGGTAATATGTGCTAAGAAGTTATTCATGGCGGACTTGCAACGAGTGTTCACC  
 AACTGCAAGGAGTACAACCCTCCCGAGAGCGAGTACTACAAATGCCCCAGCATCCTGGAGAAGTTCTTCT  
 TCAGTAAAATTAAGGAAGCAGGGTTGATTGACAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR225908 representing NM\_001190846  
Red=Cloning site Green=Tags(s)

```
MSPEMAEECKCNGWKNPNPSPPTPRGDLQQIIIVSLTESCRSCSHALAAHVSHLENVSEEEMDRLLGIVL
DVEYLFVCVHKEEDADTKQVYFYLFKLLRKSILQRGKPVVEGSLEKKPPFEKPSIEQGVNNFVQYKFSHL
PSKERQTTIELAKMFLNRINYWHLEAPSQRRLRSPNDDISGYKENYTRWLCYCNVPQFCDSLPRYETTKV
FGRTLRSVFTIMRRQLLEQARQEKDKLPLEKRTLILTHFPKFLSMLLEEVYSQNSPIWDQDFLSASSRT
SPLGIQTVISPPVTGTALFSSNSTSHEQINGGRTSPGCRGSSGLEANPGEKRMNNSHAPEEAKRSRVMG
DIPVELINEVMSTITDPAGMLGPETNFLSAHSARDEAARLEERRGVIEFHVVGNLSLNQKPNKKILMWLVG
LQNVFSQLPRMPKEYITRLVFDPKHKLALIKDGRVIGGICFRMFPSQGFTEIVFCAVTSNEQVKGYGT
HLMNHLKEYHIKHEILNFLTAYADEYAIGYFKQGFKEIKIPKTKYVGYIKDYEGATLMGCELNPQIPYT
EFSVIIKKQKEIKKLIERKQAQIRKVYPGLSCFKDGVQPIESIPGIRETGWKPSPGKEKSKEPKDPEQ
LYSTLKNILQQVKNHPNAWPFMEPVKRTEAPGYEVIRFPMDLKTMSERLRNRYVSKKLFMADLQRVFT
NCKEYNPPESEYKCAKILEKFFFSKIKEAGLIDK
```

TRTRPLEQKLISEEDLANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9033\\_b11.zip](https://cdn.origene.com/chromatograms/mm9033_b11.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001190846

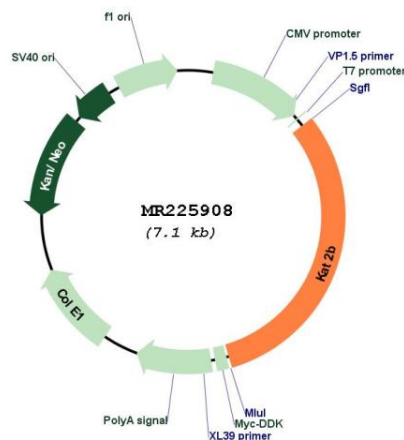
**ORF Size:** 2205 bp

**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.

<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>	<u>NM_001190846.1, NP_001177775.1</u>
<b>RefSeq Size:</b>	4100 bp
<b>RefSeq ORF:</b>	2208 bp
<b>Locus ID:</b>	18519
<b>Cytogenetics:</b>	17 27.86 cM
<b>MW:</b>	85.1 kDa
<b>Gene Summary:</b>	<p>Functions as a histone acetyltransferase (HAT) to promote transcriptional activation. Has significant histone acetyltransferase activity with core histones (H3 and H4), and also with nucleosome core particles. Also acetylates non-histone proteins, such as ACLY, PLK4 and TBX5. Inhibits cell-cycle progression and counteracts the mitogenic activity of the adenoviral oncoprotein E1A. Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-ARNTL/BMAL1 and CLOCK-ARNTL/BMAL1 heterodimers. Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5. Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4. Also acetylates spermidine (By similarity).[UniProtKB/Swiss-Prot Function]</p>

### Product images:



Circular map for MR225908