

## Product datasheet for **MG210784**

### **Kat2b (NM\_020005) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kat2b (NM_020005) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kat2b
Synonyms:	A930006P13Rik; AI461839; AW536563; p/CAF; Pcaf
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG210784 representing NM\_020005  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGAGGCTGGCGGGCCGGTCCCCAGCACTGCCTCCCGGCCCGCACGGTTCCCGCGGACCC  
 TGGCCACCGCTGCCGGGAGCTCTGCTTCCCTGCGGGCCAGCGACCGCGGTGGCCGCGGGCAGCGCCGA  
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**ACCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

Protein Sequence: >MG210784 representing NM\_020005  
Red=Cloning site Green=Tags(s)

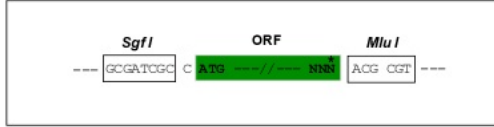
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI      BamHI KpnI      RBS      Kozac Consensus      SgfI      AscI  
 CTATAGGGGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

HindIII      NheI      RsrII      MluI      NotI      XhoI      GFP Tag  
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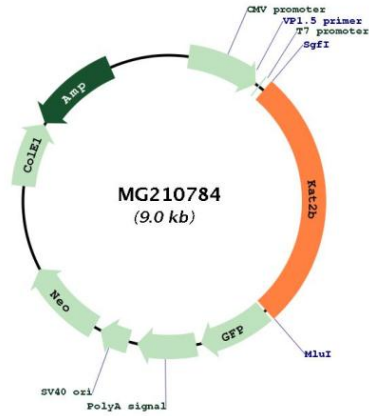
T      R      T      R      P      L      E      M      E      S      D      -      -      -

--- ---      PmeI      FseI  
 --- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT  
 - - - E E R V Stop

ACCN:                      NM\_020005  
 ORF Size:                2439 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	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>	<a href="#">NM_020005.4</a>
<b>RefSeq Size:</b>	4309 bp
<b>RefSeq ORF:</b>	2442 bp
<b>Locus ID:</b>	18519
<b>UniProt ID:</b>	<a href="#">Q9JHD1</a>
<b>Cytogenetics:</b>	17 27.86 cM
<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 MG210784