

## Product datasheet for **RG201852**

### **katanin p80 (KATNB1) (NM\_005886) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	katanin p80 (KATNB1) (NM_005886) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	katanin p80
Synonyms:	KAT; LIS6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG201852 representing NM\_005886  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCCACCCCTGTGGTACCAAGACAGCCTGGAAGTTGCAAGAGATCGTCGCGCATGCCAGCAACGTGT  
CCTCACTGGTGTGGCAAAGCCTCCGGGCGGCTGCTGGCTACAGCGGGGATGACTGCCGCGTCAACCT  
GTGGTCCATCAACAAGCCCAACTGCATCATGAGCCTGACGGGCCACACATCCCCAGTGGAGAGCGTCCGC  
CTCAACACCCCGAGGAGCTCATCGTGGCCGGCTCTCAGTCGGGCTCCATCCGTGTCTGGGACCTGGAAG  
CTGCCAAAATTCTTCGCACACTCATGGACACAAAGCCAACATCTGCAGCCTGGATTTCCACCCGTACGG  
CGAGTTTGTAGCCTCTGGTTCCAGGACACAAACATCAAGCTCTGGGACATCAGGAGGAAAGGCTGTGTC  
TTCGATACAGGGGGCACAGCCAGGCCGTGCGGTGTCTCCGGTTCAGCCCCGATGGGAAGTGGTTGGCGT  
CGGCCGAGATGACCACACCGTGAAGCTCTGGGATCTCACTGCCGCAAGATGATGTCTGAGTTCCTGG  
TCACACGGGGCTGTCAACGTGGTCCGATTTACCCCAACGAGTACCTCCTGGCCTCCGGCAGCTGTGAC  
AGGACAATCCGCTTCTGGGACCTGGAGAAGTCCAGGTGGTGGCTGCATCGAAGGGGAGCTGGGCCCCG  
TCAGGAGCGTCTCTTCAACCCAGATGGCTGTGCCTGTACAGCGGCTGCCAGGACTCACTGCGTGTCTA  
CGGCTGGGAACCTGAGCGGTGCTTTGATGTGGTCTCTCAACTGGGCAAGGTGGCCGACCTGGCCATC  
TGCAATGACCAGTTGATAGGTGTGGCCTTCTCCAGAGCAACGTCTCCTCCTACGTGGTGGATCTGACGC  
GTGTACCAGGACTGGCAGGTGGCCCGGGACCTGTGCAGGACCACCGGCCCTGGCACAGCCACTGCC  
CAACCCAGCGCCCCCTCCGGCGCATCTATGAGCGGCCAGCACAACTGCAGCAAGCCTCAGAGGGTG  
AAGCAGAATCAGAGAGCGAGCGCCGACGCCAGCAGCGAGGATGACCGGGACGAGCGCGAGTCCCGCG  
CGGAGATCCAGAACGCCGAGGACTACAACGAGATCTTCCAGCCCAAGAACAGCATCAGTCGGACGCCACC  
CCGGAGAAGTGAGCCCTTCCCTGCACCCCAAGGACGACGACGACGCAAGGAGGAGCAAGGCC  
AGCCCTGCCATGGATGTGCAAGTCCCGGTGCCAAATCTGGAGGTCTGCCCGGCCCCAGTGGTTGCTT  
CCACACCTGCACCAAGGCTGAGCCTGCCATCATCCCTGCCACCCGGAACGAGCCATCGGGCTGAAGGC  
CTCCGACTTCTGCCCGCGTGAAGATCCCCAGCAGGCCGAGCTGGTGGACGAGGATGCCATGTCACAG  
ATCCGCAAAGGCCAGCACCATGTGTGTGGTGTCTACCAGCCGCCACAAGAACCTGGACACTGTGCGGG  
CTGTGTGGACCATGGGCGACATCAAGACGTCGGTGGACTCCGCTGTGGCCATCAACGACCTGTGCGTGGT  
GGTGGACCTCCTGAACATCGTCAACCAGAAAGCCTCCCTGTGGAAGCTGGACCTGTGCACCACCGTCCCTG  
CCACAGATTGAGAAGCTTCTGCAGAGCAAGTATGAGAGCTACGTCCAGACGGGCTGCACCTCCCTGAAGC  
TGATCCTGCAGCGGTTTCTGCCCTCATCACAGACATGCTGGCGGCCACCCTCTGTGGGTGTGGATAT  
CAGCAGGGAGGAGGCTGCATAAGTGCCGGCTCTGCTACAAGCAGCTTAAAGAGCATCAGCGCCTGGTC  
AAGAGCAAGTCAGGCCTGAGCGGCCCATGGCAGTACCTTCCGCGAGCTGCACCTGCTCATGGCCAGTC  
TGGAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

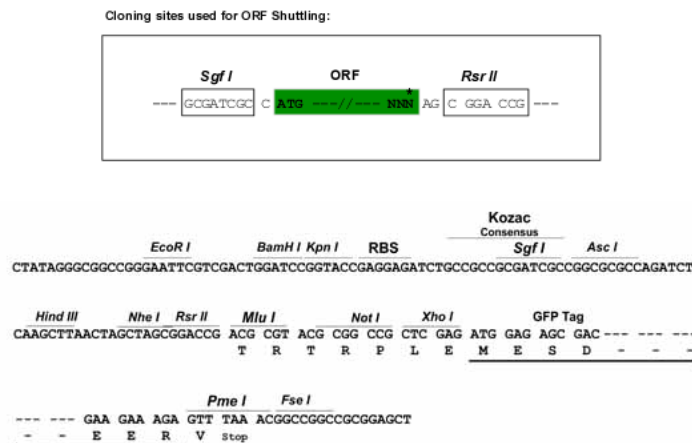
**Protein Sequence:** >RG201852 representing NM\_005886  
Red=Cloning site Green=Tags(s)

MATPVVTKTAWKLQEIVAHASNVSSLVLGKASGRLLATGGDDCRVNLWSINKPNCIMSLTGHTSPVESVR  
 LNTPEELIVAGSQSGSIRVWDLAAKILRTLGMGHKANICSLDFHPYGEFVASGSQDTNIKLDIRRKGCV  
 FRYRGHSQAVRCLRFSPDGKWLASAADDHTVKLWDLTAGKMMSEFPGHTGPVNVVEFHPNEYLLASGSSD  
 RTIRFDWLEKFQVVSCIEGEPGVRVSVLFPDGCCLYSGCQDSLRYVWEPERCFDVVLVNWGKVADLAI  
 CNDQLIGVAFSQSNVSSYVVDLTRVTRTGTVARDPVQDHRPLAQPLPNPSAPLRRYERPSTTCSKPQRV  
 KQNSESERRSPSSEDDRRERESRAEIQNAEDYNEIFQPKNSISRTPRRSEPFPAPPEDDAATAKEAAKP  
 SPAMDVQFPVPLEVLPVPPVASTPAPKAEPAIIPATRNEPIGLKASDFLPAVKIPQQAELVDEDAMSQ  
 IRKGHDTMCVVLTSRHKNLDTVRAVWTMGDIKTSVDSAVAINDLSVVVDLLNIVNQKASLWKLDLCTTVL  
 PQIEKLLQSKYESYVQTGCTSLKILQRFLPLITDMLAAPPVSGVDISREERLHKRCLCYQLKSIISGLV  
 KSKSGLSGRHGSTFRELHLLMASLD

SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_005886

**ORF Size:** 1965 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\\_005886.2](#), [NP\\_005877.2](#)

**RefSeq Size:** 2661 bp

**RefSeq ORF:** 1968 bp

**Locus ID:** 10300

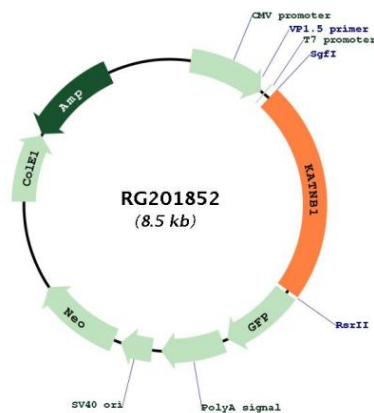
**UniProt ID:** [Q9BVA0](#)

**Cytogenetics:** 16q21

**Domains:** WD40

**Gene Summary:** Microtubules, polymers of alpha and beta tubulin subunits, form the mitotic spindle of a dividing cell and help to organize membranous organelles during interphase. Katanin is a heterodimer that consists of a 60 kDa ATPase (p60 subunit A 1) and an 80 kDa accessory protein (p80 subunit B 1). The p60 subunit acts to sever and disassemble microtubules, while the p80 subunit targets the enzyme to the centrosome. Katanin is a member of the AAA family of ATPases. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG201852