

Product datasheet for **MG207813**

Katnal1 (NM_153572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Katnal1 (NM_153572) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Katnal1
Synonyms:	MGC40859
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG207813 representing NM_153572
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATTTGGCGGAGATTTGTGAGAATGCGAAGAAAGCCGGGAATATGCGCTTCTGGGAAATTATGACT
 CGTCAATGGTGTATTACACAGGGAGTGATACAGCAGATCCAGAGACTGCCAGTCACTGAGAGACCCGGC
 CACCAAAGCCAAGTGGCAGCAGGTACGGCAGGAACTCTTGGAAGAATATGAACAGGTTAAGAGTATCGTC
 AGCACTTTAGAAAGCTTTAAGATGGACAAGCCCTGACTTCCCGTGTCTTGCCGAGATGAACCGTTTA
 GAGACCTGCAGTATGGCCACCCCTGTCCCTGCGGAACACAGAGACCCCTCAAATCAGGCGTCCAAA
 TCGCGAAGTGAGGCTCTGCGGAAAGACGTGGGGCAGGAGCCCGGGGACTCGTGGGCCGAGCACACCAG
 ATATCGAAGAGTGACAACTGCAAGTCCGGACAAGGACTATAGAGCAAGAGGGAGAGATGACAAGGCAA
 GAAAAATGTGCAAGATGGTCAAGTACAGCGAGATCCCAAGTTTGATGGCGCCGGTATGATAAGGA
 TCTGGTGAAGCCCTGGAGAGGGACATTGTGTCCAGGAACCTAGCATTCACTGGGATGACATAGCAGAC
 CTGGAGGAGGCTAAGAAGTTGCTCCGGGAAGCTGTTGTCCTGCCATGTGGATGCCTGACTTTTTCAAAG
 GGATTAGAAGGCCATGGAAGGTGTGCTGATGGTTGGCCCCCAGGCACTGGTAAGACTATGCTGGCTAA
 AGCGGTTGCCACTGAATGTGGACAACCTTTTTCAACGTGCTCTTCTACCCTGACATCTAAGTACAGA
 GGCGAATCTGAGAAGTTGGTCCGACTGTTGTTGAAATGGCTAGGTTCTATGCCCTACCACGATCTTCA
 TCGACGAAATTGATTCTATCTGCAGTCGAAGAGGGACGCTGTATGAGCACGAGGCAAGCCGAGAGTCAA
 GTCGGAGCTCCTCATCCAGATGGATGGAGTTGGAGGAGCCTTAGAAAAATGATGCCCATCCAAAAATGGTG
 ATGGTCTGGCTGCTACGAACTTTCCGTGGGACATTGATGAGGCTCTGCGCAGGAGACTAGAGAAAAGGA
 TTTACATTCTCTCCCGACAGCAAAGGAAGAGCGGAGCTCCTGAAGATCAGCCTCCGGGAGGTAGAGTA
 GGACCCCGATGTCCACCTGGAGGACATCGCCGACAAGACGGAGGGCTACTCGGGTGCCGACATCACTAAC
 ATCTGCAGGGACGCTTTTGTGTCGATGAGGCGGCATCAATGGCTTGTGAGTCCGGAAGAGATCCGGG
 CCCTGTCCAAGGAGGAGCTGCAGATGCCTGTACCAGAGGGGACTTGGAGTTGGCTCTGAAGAAAATCGC
 CAAGTCTGTCTCAGCGGCAGACCTGGAGAAGTACGAAAAGTGGATGGTTGAGTTGGGTCTGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207813 representing NM_153572
 Red=Cloning site Green=Tags(s)

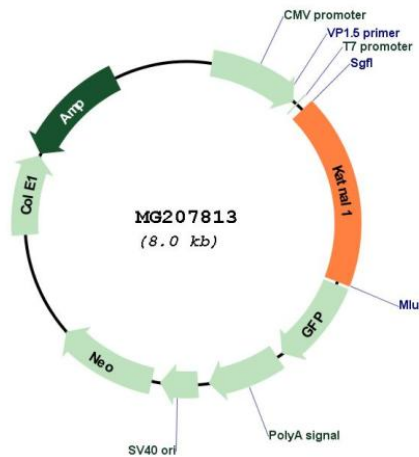
MNLAEICENAKKGREYALLGNYDSSMVYQGVIIQQIQRHCQSLRDPATKAKWQVVRQELLEEEYEQVKSIV
 STLESFKMDKPPDFPVSCRDEPFRDPAVWPPVPAEHRAPPQIRRPNREVRPLRKDVGAGARGLVGRAHQ
 ISKSDKPASRDKDYRARGRDDKARKNVQDGASDSEIPKFDGAGYDKDLVEALERDIVSRNPSIHWDDIAD
 LEEAKLLREAVVLPMMWPDFFKGIRRPWKGVLMVGPPTGKTMALAKAVATECGTTFNVSSTLTSKYR
 GESEKLVRLLFEMARFYAPTTIFIDEIDSICSRRTSDEHEASRRVKSELLIQMDGVGGALENDPDKMV
 MVLAATNFPWDIDEALRRRLEKRIYIPLPTAKGRAELKISLREVELDPDVHLEDIADKTEGYSGADITN
 ICRDASLMAMRRRINGLSPEEIRALSKEELQMPVTRGDLELALKKIAKSVSAAADLEKYEKWMVEFGSA

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_153572

ORF Size: 1464 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_153572.2](#), [NP_705800.1](#)

RefSeq Size: 1666 bp

RefSeq ORF: 1467 bp

Locus ID: 231912

UniProt ID: [Q8K0T4](#)

Cytogenetics: 5 G3

Gene Summary: Regulates microtubule dynamics in Sertoli cells, a process that is essential for spermiogenesis and male fertility. Severs microtubules in an ATP-dependent manner, promoting rapid reorganization of cellular microtubule arrays (PubMed:22654668). Has microtubule-severing activity in vitro (By similarity).[UniProtKB/Swiss-Prot Function]