

Product datasheet for **MR207813**

Katnal1 (NM_153572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Katnal1 (NM_153572) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Katnal1
Synonyms:	MGC40859
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207813 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAATTTGGCGGAGATTTGTGAGAATGCGAAGAAAGCCGGGAATATGCGCTTCTGGGAAATTATGACT
 CGTCAATGGTGTATTACCAGGGAGTGATACAGCAGATCCAGAGACTGCCAGTCACTGAGAGACCCGGC
 CACCAAAGCCAAGTGGCAGCAGGTACGGCAGGAACTCTTGGAAGAATATGAACAGGTTAAGAGTATCGTC
 AGCACTTTAGAAAGCTTTAAGATGGACAAGCCCTGACTTCCCGTGTCTTGCCGAGATGAACCGTTTA
 GAGACCTGCAGTATGGCCACCCCTGTCCCTGCGGAACACAGAGACCCCTCAAATCAGGCGTCCAAA
 TCGCGAAGTGAGGCTCTGCGGAAAGACGTGGGGCAGGAGCCCGGGACTCGTGGGCCGAGCACACCAG
 ATATCGAAGAGTGACAACTGCAAGTGGGACAAGGACTATAGAGCAAGAGGGAGAGATGACAAGGCAA
 GAAAAATGTGCAAGATGGTCAAGTACAGCGAGATTCCAAGTTTGATGGCGCCGGTATGATAAGGA
 TCTGGTGAAGCCCTGGAGAGGACATTGTGTCCAGGAACCTAGCATTCACTGGGATGACATAGCAGAC
 CTGGAGGAGGCTAAGAAGTTGCTCCGGGAAGCTGTTGTCCTGCCATGTGGATGCCTGACTTTTTCAAAG
 GGATTAGAAGGCCATGGAAGGTGTGCTGATGGTTGGCCCCCAGGCACTGGTAAGACTATGCTGGCTAA
 AGCGGTTGCCACTGAATGTGGACAACCTTTTTCAACGTGTCCTTCTACCCCTGACATCTAAGTACAGA
 GGCGAATCTGAGAAGTTGGTCCGACTGTTGTTGAAATGGCTAGGTTCTATGCCCTACCACGATCTTCA
 TCGACGAAATTGATTCTATCTGCAGTCGAAGAGGGACGCTGTATGAGCACGAGGCAAGCCGAGAGTCAA
 GTCGGAGCTCCTCATCCAGATGGATGGAGTTGGAGGAGCCTTAGAAAAATGATGCCCATCCAAAATGGTG
 ATGGTCTGGCTGCTACGAACTTTCCGTGGGACATTGATGAGGCTCTGCGCAGGAGACTAGAAAAAGGA
 TTTACATTCCTCTCCCGACAGCAAAGGAAGAGCGGAGCTCCTGAAGATCAGCCTCCGGGAGGTAGAGT
 GGACCCCGATGTCCACCTGGAGGACATCGCCGACAAGACGGAGGGCTACTCGGGTGCCGACATCACTAAC
 ATCTGCAGGGACGCTTCTTTGATGGCGATGAGGCGGCGCATCAATGGCTTGAAGTCCGGAAGAGATCCGGG
 CCCTGTCCAAGGAGGAGCTGCAGATGCCTGTACCAGAGGGGACTTGGAGTTGGCTCTGAAGAAAATCGC
 CAAGTCTGTCTCAGCGGCAGACCTGGAGAAGTACGAAAAGTGGATGGTTGAGTTGGGTCTGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207813 protein sequence
 Red=Cloning site Green=Tags(s)

MNLAEICENAKKGREYALLGNYDSSMYYQGVIIQIQRHCQSLRDPATKAKWQVQRQELLEEEYEQVKSIV
 STLESFKMDKPPDFPVSCRDEPFRDPAVWPPVPAEHRAPPQIRRPNREVRPLRKDVGAGARLVGRAHQ
 ISKSDKPASRDKYRARGRDRDKARKNVQDGADSEIPKFDGAGYDKDLVEALERDIVSRNPSIHWDIAD
 LEEAKLLREAVVLPMMWPDFFKGIRRPWKVLMVGGPGTGKMLAKAVATECGTTFNVSSTLTSKYR
 GESEKLVRLLFEMARFYAPTTIFIDEIDSICSRRTSDEHEASRRVKSSELLIQMDGVGGALENDPSKMV
 MVLAATNFPWDIDEALRRRLEKRIYIPLPTAKGRAELKISLREVELDPDVHLEDIADKTEGYSADITN
 ICRDASLMAMRRRINGLSPEEIRALSKEELQMPVTRGDLELALKKIAKSVSAAADLEKYEKWMVEFGSA

TRTRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_153572

ORF Size: 1467 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: 6173 bp

RefSeq ORF: 1467 bp

Locus ID: 231912

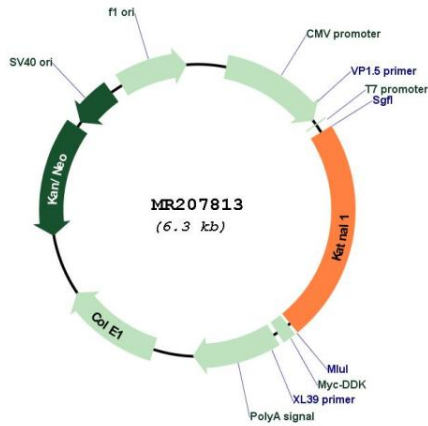
UniProt ID: [Q8K0T4](#)

Cytogenetics: 5 G3

MW: 55.2 kDa

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]

Product images:



Circular map for MR207813