

Product datasheet for **RC217337**

KATNA1 (NM_007044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KATNA1 (NM_007044) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KATNA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217337 representing NM_007044
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTCTTCTTATGATTAGTGAGAATGTAAAATTGGCTCGTGAATATGCATTGCTGGGAACTATGACT
 CTGCGATGGTCTATTATCAGGGAGTTCTTGACCAATGAACAAGTATCTGTACTCAGTCAAAGATACATA
 CCTCCAGCAGAAATGGCAACAGGTTTGGCAGGAAATAAATGTGGAAGCTAAACATGTTAAAGATATCATG
 AAAACACTAGAGAGCTTTAACTGGACAGCACTCCCTTGAAGCGGCACAGCATGACCTTCCAGCTTCTG
 AGGGAGAAGTCTGGTCCATGCCTGTACCTGTTGAACGAAGACCCTCACCAGGACCTAGAAAACGCCAATC
 TTCTCAGTACAGTGACCCTAAATCACATGGTAATCGTCCAAGTACAACGTGCAGAGTTACCAGTTTCATCT
 GCACAGAATGTTACAATGACAGAGGGAAAGCTGTTCTGTTGCTGAAAAGAAAGACAGAATAAAGGAA
 GAGAGGAAAAGAACAAATCACCTGCTGCAGTAACAGAACAGAGACAAATAAATTTGATAGTACCGGATA
 TGATAAAGACTTAGTAGAAGCTTTGAAAGAGATATAATTTCCAGAATCCCAATGTTGATGGGATGAT
 ATCGCTGATTTAGTAGAAGCTAAAAAGTTGCTTAAGGAAGCCGTAGTGTTACCAATGTGGATGCCCGAAT
 TCTTTAAGGGCATTAGGAGACCATGAAAAGGAGTACTGATGGTTCGGCCACCTGGCACGGGGAAGACGCT
 CCTTGCTAAAGCAGTAGCTACAGAATGCAAGACAACATTCTTCAATGTCTCTTCACTCAACTTTGACTTCC
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 AAGGGTGAAAGCGGAGCTGCTGGTTCAGATGGATGGTGTGGAGGTACTTCTGAAATGATGACCTTCC
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 AGAAACGAATCTATATTCCTTTGCCGTGAGCAAAAGGCAGGGAGGAGCTATTACGAATAAGTCTACGTGA
 GTTGGAAATTGGCTGATGATGTTGACCTTGCAAGTATAGCAGAAAACATGGAAGTTATTCAGGTGCGGAC
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 TGC

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Protein Sequence:

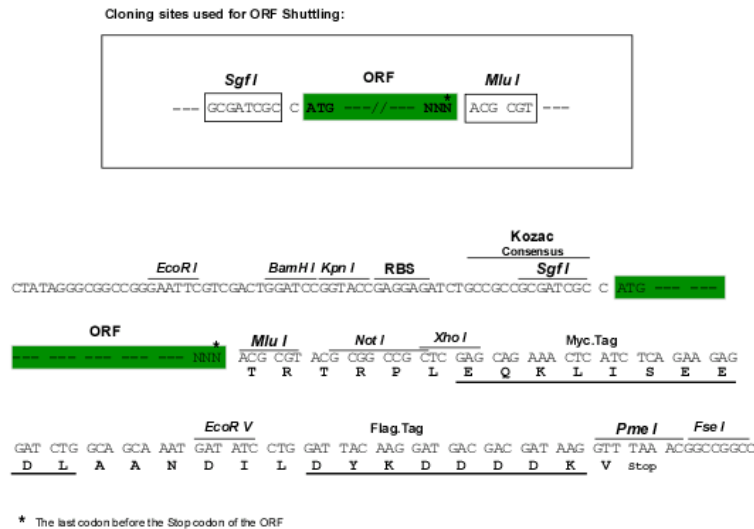
>RC217337 representing NM_007044
 Red=Cloning site Green=Tags(s)

MSLLMISENVKLAREYALLGNYDSAMVYYQGVLDQMKNKYLSVKDTYLQQKWQQVWQEINVEAKHVKDIM
 KTLESFKLDSTPLKAAQHDLPASEGEVWSMPVPVERRRSPGPRKRQSSQYSDPKSHGNRPSTTVRVHRSS
 AQNVHNRDGRKAVRCREKKEQNGREEKNKSPAAVTEPETNKFDTGYDKDLVEALERDIIISQNPVNRWDD
 IADLVEAKKLLKEAVVLPMMWPEFFKGIRRPWKGVLMVGPPGTGKTLAKAVATECKTTFFNVSSSTLTS
 KYRGESEKLVRLLFEMARFYSPATIFIDEIDSICSRRTSEEHEASRRVKAELLVQMDGVGVTSENDPS
 KMVMVLAAATNFPWDIDEALRRRLKRIYIPLPSAKGRELLRISLRELELADDVDLASIAENMEGYSGAD
 ITNVCRDASLMAMRRRIEGLTPEEIRNLSKEEMHPTTMEDEFEMALKKVS SVSAADIERYEKWIFEFGS
 C

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_007044

ORF Size: 1473 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

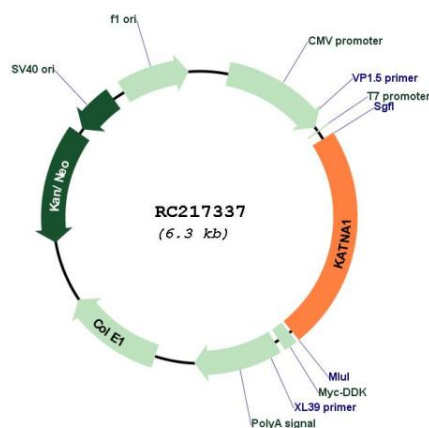
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

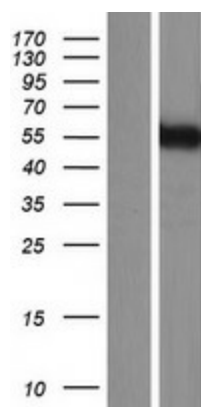
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_007044.4</u>
RefSeq Size:	1532 bp
RefSeq ORF:	1476 bp
Locus ID:	11104
UniProt ID:	<u>O75449</u>
Cytogenetics:	6q25.1
Domains:	AAA, AAA
MW:	55.8 kDa
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. This gene encodes the p80 subunit. This protein is a member of the AAA family of ATPases. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Feb 2011]

Product images:



Circular map for RC217337



Western blot validation of overexpression lysate (Cat# [LY416243]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217337 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).