

Product datasheet for MR231846

Camsap1 (NM_001276360) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Camsap1 (NM_001276360) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Camsap1
Synonyms:	9530003A05Rik; C77823; PRO2405
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231846 representing NM_001276360 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGTGGACGCGGGCGGTTCGCTGTGCCCGCAAGGCTGGAGGAGGATGGAGGCGCCCCGGAGGGCGCCG
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CATCTATGTGATGGAGAGTGATGATACCCTGTGACAGATGCTGACCTCAGCCAGGCACCTATTAAGATG
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Protein Sequence: >MR231846 representing NM_001276360
 Red=Cloning site Green=Tags(s)

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 EHIKPPVIKLLL SSEL YCRVCSL ILKGDQVATLQGHQSVIQLSRKGIYVMSDDTPVTDADLSQAPIKM
 SGHMAMVDALMMA YTVEMISIEKVVASVKRFSTFSASKELPYDLEDAMVFWINKVNLKMR EITEKEVKLK
 QQPLESPA HQSPSKWYWKLVVRYRREHL SARQSPYFPLEDLMRDGS DGAALLAVVHYCPEQMKLDD
 ICLKEVPSMADSLYNI RLLREFSNEHLNCFYLTLEDMLYAPLVLPNVVMVIAELFWFENVKPDFVQP
 RDIQELKDAKTVLQQKSRPPVPI SNATKRSFLGSPAAMSPADQPPSTQPLAEGSHRYHLHSEEPECLGK
 GASTFSPSHPLPLRQKQKVSQTTEEIPDQRHSNSL TRVDGQPRGAIGAWDPKKNRPVSQPTSFALHHA
 ASCDVPSSGDSVSLARSISKDSLASNI IHLTPQNQPHPSAGKSNGKSLLSNVNIEDEDEELVAIIRTDV
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 KTPTPSVETLPQSRSLPPSTHPRSPSDPGGELPEKCLFDSYRLHDESNHRTFVLSSCKDANIVSEQVNFK
 EGLDTSVKEAGLSSSTITGKEHTPVEEPLRSKASLIEVDLSL KAPDEDEGEVVGHESSVELGGSDQKPG
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 LIKQEYLRRKQQQAL EEQGLGKPKSKPKKPRPKSVHREESYSDSGTKSCS THNL SQTHSGSSLASAAT
 TEPE SVYSGGTPSHRVE SLEALPILSRNPSRSTDRDWETASAASSLASVAEYTGPKLFKEPSSKSNKPII
 HNAISHCCLAGKVN EPHKNSILEELEKCDANHYIILFRDAGCQFRALYCYQPDTEE IYKLTGTGPKSITK
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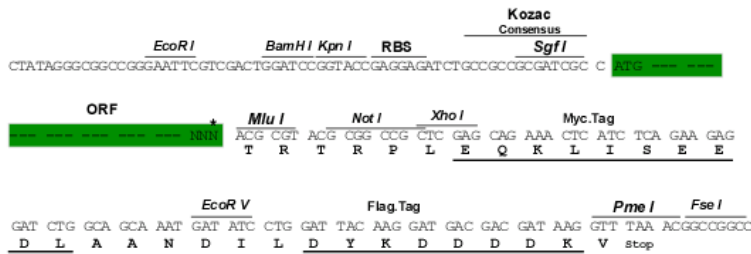
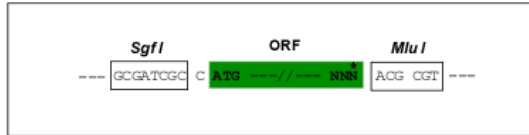
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Restriction Sites:

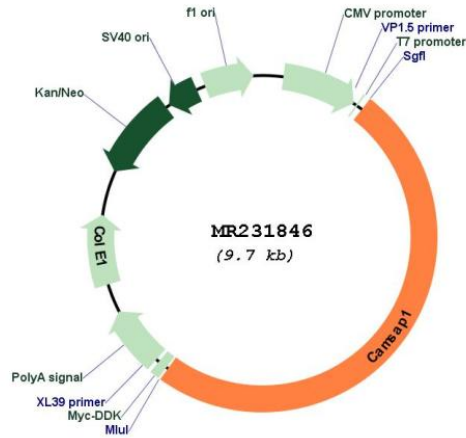
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001276360

ORF Size: 4779 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_001276360.1](#), [NP_001263289.1](#)

RefSeq Size: 8029 bp

RefSeq ORF: 4782 bp

Locus ID: 227634

UniProt ID: [A2AHC3](#)

Cytogenetics: 2 A3

MW: 177.8 kDa

Gene Summary: Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization. Specifically recognizes growing microtubule minus-ends and stabilizes microtubules. Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization. In contrast to CAMSAP2 and CAMSAP3, tracks along the growing tips of minus-end microtubules without significantly affecting the polymerization rate; binds at the very tip of the microtubules minus-end and acts as a minus-end tracking protein (-TIP) that dissociates from microtubules after allowing tubulin incorporation. Through interaction with spectrin may regulate neurite outgrowth. [UniProtKB/Swiss-Prot Function]