

Product datasheet for RR217612

Cep162 (NM_001277060) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cep162 (NM_001277060) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cep162
Synonyms:	Qn1; RGD1307365
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR217612 representing NM_001277060 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCACTATTCCAAAGTAGACCTTGATGAAGAATTTGAACGGTTTATGAAGGAGCTTTCAGATGATT
CTTTTGAAAATTCAAATGAAACACCTAGCCAGCCTAACAAAGACAGAAAGAAGAAAGACACGGCCCTTG
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CCTCCGCTTAAGTGTGACAGCTTAGAAGCTAATGAATTGGTTGCTTCTGAGCTCCATCATAGCACTCT
AGGTTTGGCCTGGACACATTAGAAGAACAAGAGGAGAAAAGAGCAGTTCTTTGCCAGGCTTGAGAAAAGGC
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CACCACTCCAGTTCTTTTCAGCTCTTGAAAAGAAAACGTCCAAGGATAATACAAAACTAAAAATGTGAG
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Protein Sequence: >RR217612 representing NM_001277060
 Red=Cloning site Green=Tags(s)

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 KTYQPIIDMEEENEKVQFLKSSGTSVLSDVSLEANELVASELHHSTLGLGLDLEEQQEKEQFFARLEKG
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 EETRPKENPESGKGSFPNQEEEKTGMLANVVLLDSFDSVEDVDLNNHERPTPKAKALPEMAGGELAETGV
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 EGVSSCPATEEHLDKMYLEILRKKTSVNPSSLPQDNKANQTSRSL SAREEAPVTSKQVPCKARSAPP
 LPRRPQSGLYASARSSGYSKPSSPLQFFSALEKKTSKDNTKTKNVRPIPTSNQFRKREILSGTKLIKPA
 ALNKPSPHREGSPATPKRPEDPSDDSFVQLQTETLGSYGGNREKELMLKRAQDAEEKWGAQALIEQIK
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 AKRIQDLERQVKEMEGILKRRYPNSLPALILAASAAGDSVDRNTVDFMERRIKKLEADLEGGDEEAKKSL
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 QSPRGREEMAARKLKEILHPNSGNANAFSETLGAKLYHPHTFTDSHISEVLEENYRRLRSELEGLTLERE
 KLMKESAAVQCLESMSKRVKDDAAAHIASLKAHEREIEKLLCQNAVENSSSRVAELNRKIATQEVLLK
 HFQGVNELQGKQESLSLQVREEILQKQITKLLLEELKEAKENHTPEMKHFGLERKIKQMEMRHKQREQ
 ELQQIIQQTRQVVETEQNKEVEKWRLAQLKNRELDKFRTELDVLDVRELHRQGVVVPVALADEESTA
 KEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

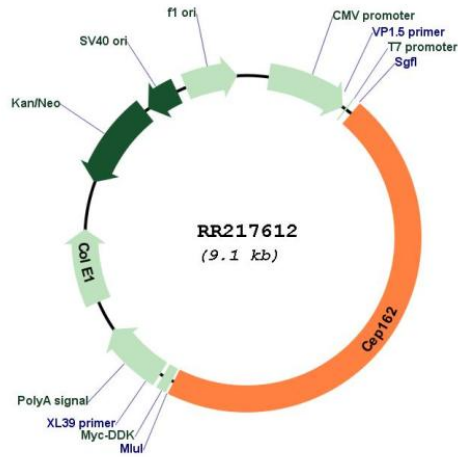
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001277060

ORF Size: 4209 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_001277060.1](#), [NP_001263989.1](#)

RefSeq Size: 5441 bp

RefSeq ORF: 4212 bp

Locus ID: 300880

UniProt ID: [Q4KLH6](#)

Cytogenetics: 8q31

MW: 161 kDa

Gene Summary: Required to promote assembly of the transition zone in primary cilia. Acts by specifically recognizing and binding the axonemal microtubule. Localizes to the distal ends of centrioles before ciliogenesis and directly binds to axonemal microtubule, thereby promoting and restricting transition zone formation specifically at the cilia base. Required to mediate CEP290 association with microtubules (By similarity).[UniProtKB/Swiss-Prot Function]