

Product datasheet for RR213192

Cdc42bpa (NM_053657) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdc42bpa (NM_053657) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdc42bpa
Synonyms:	Mrck; Pk428
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR213192 representing NM_053657 Red=Cloning site Blue=ORF Green=Tags(s)

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GCCGCGATCGCC

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AGTGCTTCAGTGTGGAGACGTTACTGGACATACTCATCTGTCTTTATGATGAATGCAATAATTCTCCATT
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AAGAAGCTAATTCTGTGAGACGAGAAGCTAGATGATGCTTTTAGGCAAATCAAAGCTTTTGAAAAACAAAT
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TGGGAGCTGGGATCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>RR213192 representing NM_053657
Red=Cloning site Green=Tags(s)

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RLHREDFEILKVI GRGAFGEVAVVVKLNADKVFAMKILNKWEMLKRAETACFREERDVLVNGDSKWITTL
HYAFQDDNNLYL VMDYYVGGDLL TLLSKFEDRLPEEMARFYLAEMVIAIDSVHQLHYVHRDIKPDNIMD
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CVAMKRQVLCYELFQSKTRHRKFKEIQVPCNVQWMAIFSEHL CVGFQSGFLRYPLNGEGSPCNMLHSNDH
TLAFITHQPMDAICAVEISNKEYLLCFSSIGIYDCQGRRSRQQLMWPANPSSCCYNAPYLSIYSENAV
DIFDVNSMEWIQTLPLKKVRPLNTEGSLNLLGLETI RLIYFKNKMAEGDEL VVPETSDNSRKQMVNRINN
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SVSIPSITKSRPEPGRSMSASSGLSARSSAQNGSALKREFSGGSYNTKRQPMPSPEGSLSSGGVDQGS
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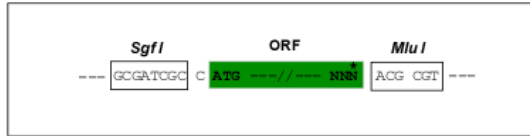
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

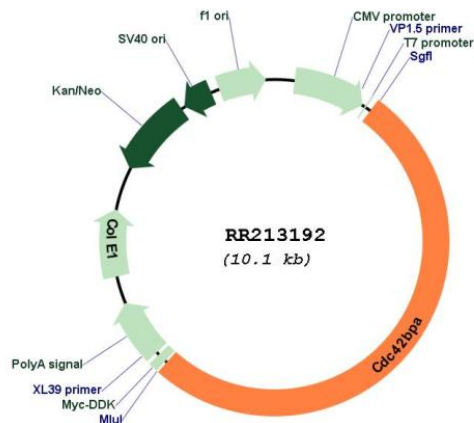
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_053657

ORF Size: 5196 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_053657.1](#), [NP_446109.1](#)

RefSeq Size: 6335 bp

RefSeq ORF: 5199 bp

Locus ID: 114116

UniProt ID: [O54874](#)

Cytogenetics: 13q26

MW: 197.1 kDa

Gene Summary: catalyzes the phosphorylation of Ser19 of nonmuscle myosin light chain; binds GTP-Cdc42 and plays a role in cytoskeleton organization [RGD, Feb 2006]