

Product datasheet for RC201162

CDC42EP4 (NM_012121) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC42EP4 (NM_012121) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDC42EP4
Synonyms:	BORG4; CEP4; KAIA1777
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201162 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCTGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCCAATCCTCAAGCAACTGGTGTCCAGCTCGGTGCACTCCAAGCGCCGTTCCCGAGCGGACCTCACGG
 CCGAGATGATCAGCGCCCGCTGGGCGACTTCCGCCACACCATGCACGTTGGCCGGGCGGAGACGCCTT
 TGGGGACACCTCCTTCTCAATAGCAAGGCTGGCGAGCCGACGCGAGTCCTTGGACGAACAGCCCTCT
 TCTTCATCTTCCAACGCAGTCTCCTGTCCAGGAAGTTCGGGGCAGCAAGCGGTACAGTCGGTGACCA
 GGGGGAGCGGGAGCAGCGTGACATGCTGGGCTCCCTGCGGGACTCGGCCCTGTTTGTCAAGAATGCCAT
 GTCCCTGCCCCAGCTCAATGAGAAGGAGGCCGCGGAGAAGGGCACCAGTAAGCTGCCAAGAGCCTGTCA
 TCCAGCCCCGTGAAGAAGGCCAATGACGGGGAGGGCGGCATGAGGAGGCGGGCACGGAGGAGGCAGTGC
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 GACAGATCTGCCTGTCGTGCCCAAGGCCACGTACGGGCTGAAGCATGCGGAGTCCATCATGTCTTCCAC
 ATCGACCTGGGGCCCTCCATGCTGGGTGACGTCTCAGCATCATGGACAAGGAGGAGTGGGACCCCGAGG
 AGGGGAGGGTGGTTACCATGGCGATGAGGGCGCCGCTGGCACCATCACCCAGGCTCCCCGTACGCCGT
 GGCGGCCCTCCCCTGGCAAGGCAGGAAGGCAAGGCTGGCCAGACTTGCCTCCCTCCCCTCCCATGCT
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 CACGGGACAGCAGCTCCCTCTCAGCTGCACCTCAGGCATCCTGGAGGAGCGCAGCCCTGCCTTCCGGGG
 GCCGGACAGGGCCCGGGTGTCTGTCTCAAGACAGCCAGACAAGGAGTTCTCCTTCATGGATGAGGAGGAG
 GAGGATGAAATCCGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC201162 protein sequence
 Red=Cloning site Green=Tags(s)

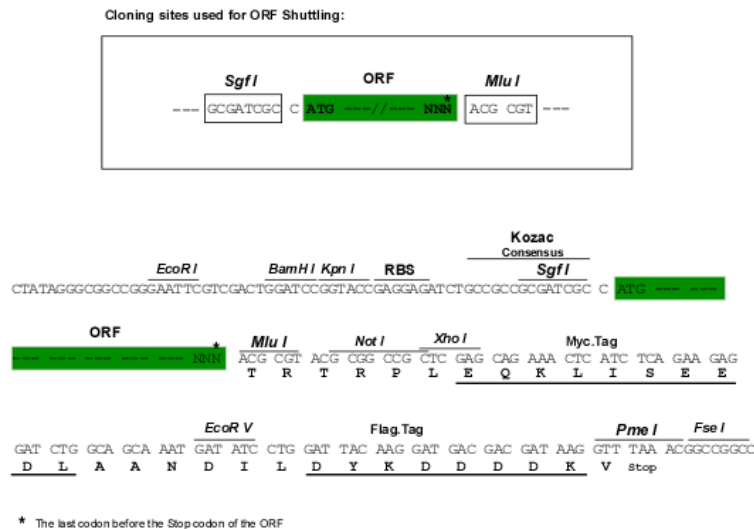
MPILKQLVSSSVHSKRSRADLTAEMISAPLGDFRHTMHVGRAGDAFGDTSFLNSKAGEPDGESLDEQPS
 SSSSKRSLLSRKFRGSKRSQSVTRGEREQRDMLGSLRDSALFVKNAMSLPQLNEKEAAEKGTSKLPKSL
 SSPVKKANDGEGGDEEAGTEEA VPRRNGAAGPHSPDPLLDQAFGDLTDLPVVPKATYGLKHAESIMSFH
 IDLGPSMLGDVLSIMDKEEWDPEEGEGGYHGDEGAAGTITQAPPYAVAAPPLARQEGKAGPDLPSLP
 SHALEDEGWAAAAAPSPGSARSMGSHHTRDSSSLSSCTSGILEERSPAFRGPDRARAASVRQPKDF
 SFMDEEE
 EDEIRV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6671_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012121

ORF Size: 1068 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_012121.5](#)

RefSeq Size: 3121 bp

RefSeq ORF: 1071 bp

Locus ID: 23580

UniProt ID: [Q9H3Q1](#)

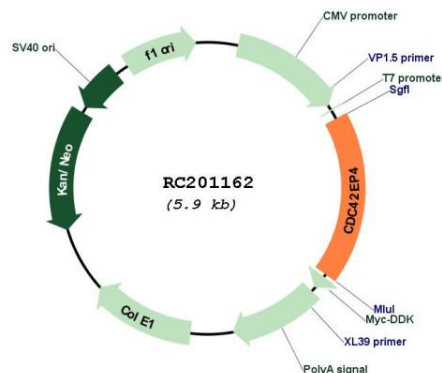
Cytogenetics: 17q25.1

Domains: PBD

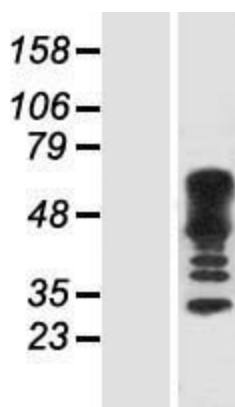
MW: 38 kDa

Gene Summary: The product of this gene is a member of the CDC42-binding protein family. Members of this family interact with Rho family GTPases and regulate the organization of the actin cytoskeleton. This protein has been shown to bind both CDC42 and TC10 GTPases in a GTP-dependent manner. When overexpressed in fibroblasts, this protein was able to induce pseudopodia formation, which suggested a role in inducing actin filament assembly and cell shape control. [provided by RefSeq, Jul 2008]

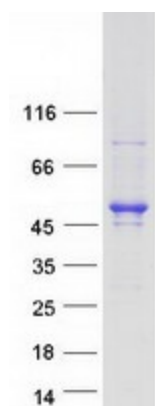
Product images:



Circular map for RC201162



Western blot validation of overexpression lysate (Cat# [LY415972]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201162 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDC42EP4 protein (Cat# [TP301162]). The protein was produced from HEK293T cells transfected with CDC42EP4 cDNA clone (Cat# RC201162) using MegaTran 2.0 (Cat# [TT210002]).