

## Product datasheet for **RG204974**

### CDC42EP2 (NM\_006779) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDC42EP2 (NM_006779) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC42EP2
Synonyms:	BORG1; CEP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204974 representing NM_006779 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCACCAAGGTGCCCATCTATCTGAAGCGTGGCAGTCGCAAGGGCAAGAAGGAGAAGCTTCGGGACC  
TGCTGTCTCTGGACATGATCAGCCACCGCTGGGGGACTTCGCCACACCATTATATTGGCAGTGGCGG  
CGGCAGTGACATGTTTGGCGACATCTCCTTCTGCAGGGCAAGTCCACCTCTGCCGGGACCATGGTG  
GAGGGGCTGAAGAAGATGGCACCTTCGACCTCCCTTCCAGTTCACCCGCACCGCCACCGTGTGTGGC  
GGGAGCTCCCGGACGGCCATCCCTCTGCTCAAGAACGCCATCTCCCTCCCGTTATCGGTGGACCCCA  
GGCTCTCACCTGCCACAGCCAGGCTCCACCCAAGCCCCCTCGCTGCACCTGGAGACCCCTCAGCCT  
TCCCCACAGGAGGGAGGGAGTGTGGACATCTGGAGGATCCAGAGACTGGCTCCCCAACAGTGGACTGA  
CCCCGGAGTCAGGGGCGGAGGAGCCCTTCTGTCCAATGCCAGCTCCCTGCTGTCCCTGCACGTGGACCT  
GGGGCCTTCCATCCTGGATGATGTCTGCAGATCATGGATCAGGACCTGGACAGCATGCAGATCCCCACA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:	>RG204974 representing NM_006779 Red=Cloning site Green=Tags(s)
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MSTKVPIYLKRGSRKGKKEKLRDLLSSDMI SPPLGDFRHTIHIIGSGGSDMFGDISFLQGFHLLPGTMV  
EGPEEDGTFDLPQFTRTATVCGREL PDGPSPLLKNAISLPVIGGPQALTLPTAQAPPKPPRLHLETPQP  
SPQEGGSVDIWRIPETGSPNSGLTPESGAEEPFLSNASSLLSLHVDLGPSILDDVLQIMDQDLDSMQIPT

**TRTRPLE** - GFP Tag - V

Restriction Sites:	SgfI-MluI
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## Cloning Scheme:



ACCN: NM\_006779

ORF Size: 630 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\\_006779.4](#)

RefSeq Size: 2001 bp

RefSeq ORF: 633 bp

Locus ID: 10435

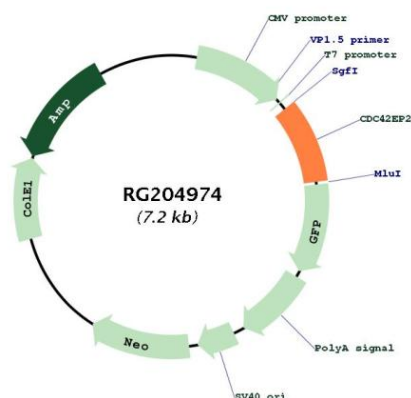
UniProt ID: [O14613](#)

Cytogenetics: 11q13.1

Domains: PBD

**Gene Summary:** CDC42, a small Rho GTPase, regulates the formation of F-actin-containing structures through its interaction with the downstream effector proteins. The protein encoded by this gene is a member of the Borg family of CDC42 effector proteins. Borg family proteins contain a CRIB (Cdc42/Rac interactive-binding) domain. They bind to, and negatively regulate the function of CDC42. Coexpression of this protein with CDC42 suggested a role of this protein in actin filament assembly and cell shape control. [provided by RefSeq, Aug 2011]

## Product images:



Circular map for RG204974