OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC204593

CDC42EP5 (NM_145057) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC42EP5 (NM_145057) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDC42EP5
Synonyms:	Borg3; CEP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204593 representing NM_145057
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCGTGCTGAAGCAGCTGGGCCCCGCGCAGCCCAAGAAGCGGCCTGATCGCGGCGCCCTGTCCATCT
CCGCGCCGCTCGGCGACTTCCGGCACACGCTGCACGTGGGGCGCGGCGGCGACGCCTTCGGGGACACCTC
GTTCCTGAGCCGCCACGGCGGCGGGCCGCCCCCCCAGCCCCGGGCGCCCCCCGCGGGGGCCCCGCGCTCC
CCGCCGCCGCCCGCCGTCCCGCAGTCCGCAGCGCCCTCGCCTGCCGACCCGCTGCTGTCCTTCCACCTGG
ATCTGGGGCCCTCCATGCTGGACGCGGTGCTGGGCGTCATGGACGCGGCGCGCCCGGAGGCGGCTGCCGC
CAAGCCCGACGCGGAACCCCGCCCCGGGACGCAGCCCCCCCAGGCCCGCTGCCGCCCCAACGCGGACCTC
GAGCTGAACGACGTCATCGGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204593 representing NM_145057
Red=Cloning site Green=Tags(s)

MPVLKQLGPAQPKKRPDRGALSISAPLGDFRHTLHVGRGGDAFGDTSFLSRHGGGPPPQPRAPPAGAPRS
PPPPAVPQSAAPSPADPLLSFHLDLGPSMLDAVLGVMDAARPEAAAAKPDAEPRPGTQPPQARCRPNADL
ELNDVIGL

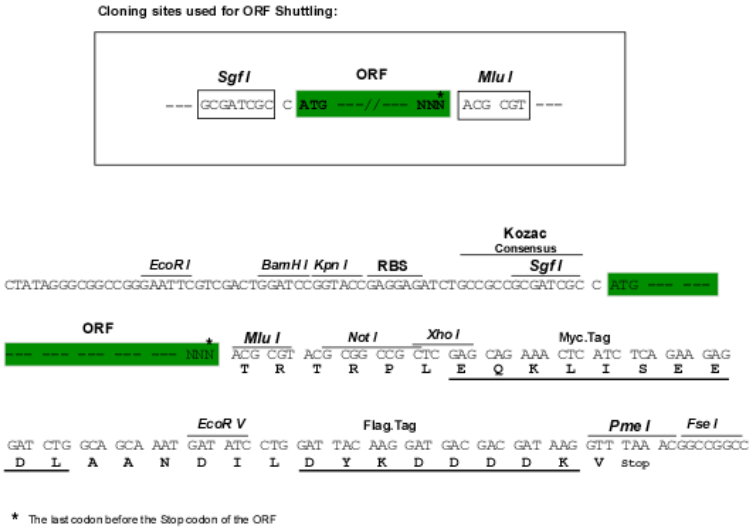
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1451_a10.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145057

ORF Size: 444 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_145057.1

RefSeq Size: 917 bp

RefSeq ORF: 447 bp

Locus ID: 148170

UniProt ID: Q6NZY7

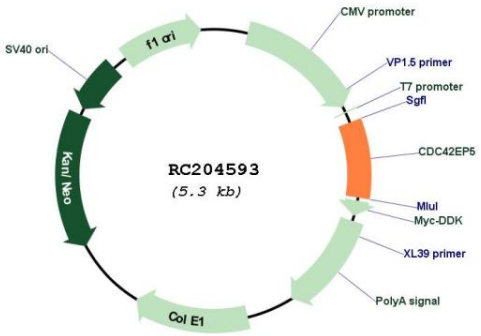
Cytogenetics: 19q13.42

Domains: PBD

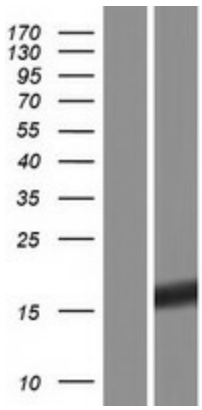
MW: 15 kDa

Gene Summary: Cell division control protein 42 (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 (binder of Rho GTPases) family of CDC42 effector proteins. Borg family proteins contain a CRIB (Cdc42/Rac interactive-binding) domain. They bind to CDC42 and regulate its function negatively. The encoded protein may inhibit c-Jun N-terminal kinase (JNK) independently of CDC42 binding. The protein may also play a role in septin organization and inducing pseudopodia formation in fibroblasts [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC204593



Western blot validation of overexpression lysate (Cat# [LY408054]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204593 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).