

Product datasheet for **RC222746**

RCCD1 (NM_001017919) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RCCD1 (NM_001017919) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RCCD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222746 representing NM_001017919 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGGAGCGGCCGGGGCCTGGTTCGGCTTCGGTTTCGCGGCTTCGGGCAGGAGCTGGGCTCCG
GACCGGGCGCCAGGTGCACAGCCCCAGTCCGCTGCGGGCGGGCTCGACATCTGCCCGTGAGCGCGAG
CTGGAGCTACACCGCTTTCGTGACCCGTGGAGGCCGCTGGAGCTGTGCGGCTCAGCCAGCGGCCGGCG
GGCCGCTGCAAGGACGCGTGGGCTCGGAGGGCTCCTCGCGGTGCTGCGCGCCGGGCGGGGCGGAGG
CGTTACTGCAGGTCTGGGCGGCCGAATCGGCGCTGCGTGGGAGCCATTGTGGCCAGAATGTGGTGCC
CGAGGCCGAAGGGGAAGACGATCCGGCCGGTGAAGCCAGGCTGGGAGGCTACCCCTGCTGCCCTGCGCC
CGTGCCTACGTGAGCCGCGGGCCCTTCTACCGGCCTCTGGCTCCGGAGCTGCGGGCACGCCAGCTGG
AGCTGGGCGCCGAGCACGCGTTGCTGCTGGACGCTGCTGGCCAGGTGTTCTCCTGGGCGGGGGCAGGCA
TGGACAGCTGGCCATGGGACCCTGGAGGCAGAGCTGGAGCCACGGCTGTTGGAGCGTTGCAGGGCCTA
GTCATGGCTGAGGTGGCCGCGGGGGCTGGCATTCTGTGTGTGAGTGAGACTGGGGATATTTATATCT
GGGGCTGGAATGAATCAGGGCAGCTGGCCCTGCCACCAGGAACCTGGCAGAGGATGGAGAGACTGTCG
AAGGGAAGCCACAGAAGTGAATGAAGATGGTTCTCAGGTGAAGAGAACGGGTGGGCTGAGGATGGAGCC
CCTGCCCTTCATAGCTGTCCAGCCCTCCCGGCATTACTGGATCTCCCATGGGCTCAGATGCAGTCA
AGGCCAGCTGTGGATCCCGGCACACAGCTGTGGTGACACGAACAGGGGAGCTCTACACCTGGGGCTGGG
TAAATATGGACAGCTGGGCCACGAGGACACCAGCTTGGATCGGCCTCGCCGTGTGGAATACTTTGTA
GATAAGCAACTCCAAGTAAAGGCTGTCACCTGTGGCCGTGGAACACCTACGTGTATGCTGTGGAGAAAG
GGAAGAGC

AG**CGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC222746 representing NM_001017919
Red=Cloning site Green=Tags(s)

MAEERPGAWFGFGFCGFGQELGSGRGRQVHSPSPLRAGVDICRVASWSYTAFTVTRGGRLLESGSASGAA
 GRCKDAWASEGLLAVLRAGPGPEALLQVWAAESALRGEPLWAQNVVPEAEGEDDPAGEAQAGRLPLLPCA
 RAYVSPRAPFYRPLAPELRARQLELGAEHALLDAAGQVFSWGGGRHGQLGHGTLEAELEPRLLEALQGL
 VMAEVAAGGWHSVCVSETGDIYIWGWNESGQLALPTRNLAEDETVAREATELNEDGSQVKRTGGAEDGA
 PAFP IAVQFPFALLDLPMGSDAVKASCSGRHTAVVTRTGTGELYTWGWGKYGQLGHEDTTSLDRPRRVEYFV
 DKQLQVKAVTCGPWNTYVYAVEKGKS

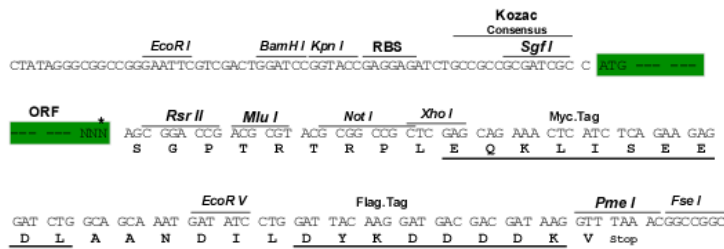
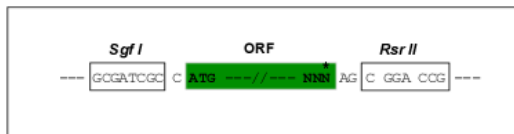
SGPTRTRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1285_h08.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001017919

ORF Size: 1128 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_001017919.1](#), [NP_001017919.1](#)

RefSeq Size: 2690 bp

RefSeq ORF: 1131 bp

Locus ID: 91433

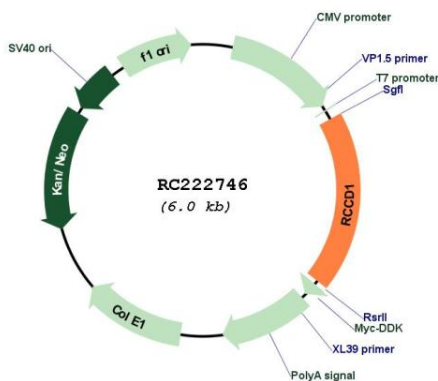
UniProt ID: [A6NED2](#)

Cytogenetics: 15q26.1

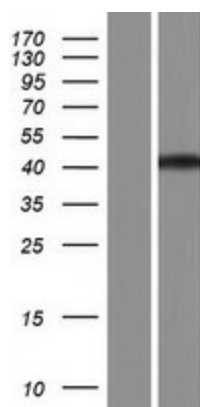
MW: 39.9 kDa

Gene Summary: Plays a role in transcriptional repression of satellite repeats, possibly by regulating H3K36 methylation levels in centromeric regions together with KDM8 (PubMed:24981860). Possibly together with KDM8, is involved in proper mitotic spindle organization and chromosome segregation (PubMed:24981860). Plays a role in regulating alpha-tubulin deacetylation and cytoskeletal microtubule stability, thereby promoting cell migration and TGF-beta-induced epithelial to mesenchymal transition (EMT), potentially through the inhibition of KDM8 (PubMed:28455245).[UniProtKB/Swiss-Prot Function]

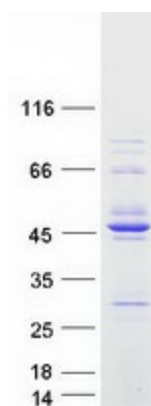
Product images:



Circular map for RC222746



Western blot validation of overexpression lysate (Cat# [LY422749]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222746 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RCCD1 protein (Cat# [TP322746]). The protein was produced from HEK293T cells transfected with RCCD1 cDNA clone (Cat# RC222746) using MegaTran 2.0 (Cat# [TT210002]).