

## Product datasheet for RC210522

### hCAP D3 (NCAPD3) (NM\_015261) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	hCAP D3 (NCAPD3) (NM_015261) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	hCAP D3
Synonyms:	CAP-D3; CAPD3; hCAP-D3; hcp-6; hHCP-6; MCPH22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210522 representing NM_015261 Red=Cloning site Blue=ORF Green=Tags(s)

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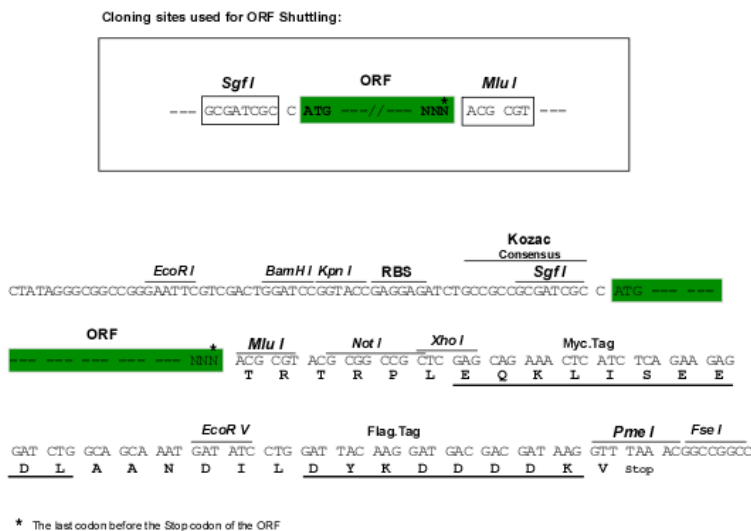
**Protein Sequence:** >RC210522 representing NM\_015261  
 Red=Cloning site Green=Tags(s)

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```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_015261

**ORF Size:** 4494 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_015261.3](#)

**RefSeq Size:** 5661 bp

**RefSeq ORF:** 4497 bp

**Locus ID:** 23310

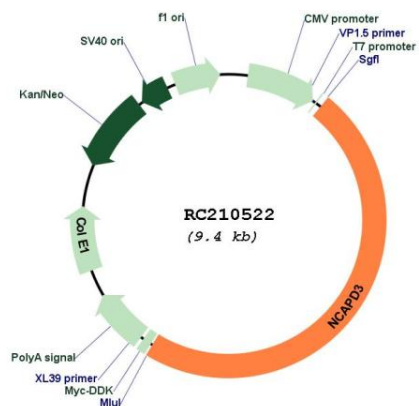
**UniProt ID:** [P42695](#)

**Cytogenetics:** 11q25

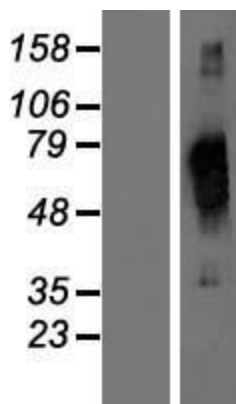
**MW:** 168.9 kDa

**Gene Summary:** Condensin complexes I and II play essential roles in mitotic chromosome assembly and segregation. Both condensins contain 2 invariant structural maintenance of chromosome (SMC) subunits, SMC2 (MIM 605576) and SMC4 (MIM 605575), but they contain different sets of non-SMC subunits. NCAPD3 is 1 of 3 non-SMC subunits that define condensin II (Ono et al., 2003 [PubMed 14532007]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC210522



Western validation with an anti-DDK antibody; L: Control HEK293 lysate R: Over-expression lysate