

Product datasheet for **SC304275**

hCAP D3 (NCAPD3) (NM_015261) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	hCAP D3 (NCAPD3) (NM_015261) Human Untagged Clone
Tag:	Tag Free
Symbol:	hCAP D3
Synonyms:	CAP-D3; CAPD3; hCAP-D3; hcp-6; hHCP-6; MCPH22
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_015261 edited
 ATAGGGCGGCCGATAAATTCTGATAGCATACATTATACGAAAGTTATGGATCAGGCCAAA
 TCGGCCGAGCTCGAATTCGTGAGCTCTAGCGAGGTGACAGCGTAGAACAGGGCGCGC
 CGCGGGAGCGAGCTTTGAAAGTTGAGCACGGCGCGCGAGCCGGTGCCCTGGGATCATG
 GTGGCGTTGCGGGGCCCTTGGTAGCGCCTGCAGCCCTGGTGTCCGCTGGATCTTAGACTC
 GAATGGGTTGACACAGTGTGGAACTGGATTTACAGAGACTGAGCCTTTGGATCCCAGC
 ATAGAAGCAGAGATCATAGAGACTGGATTGGCTGCATTCAAAACTCTATGAAAGCCTT
 TTACCCTTTGCTACTGGAGAACATGGATCTATGGAGAGTATCTGGACCTTCTTCATTGAG
 AACAAATGTTTCCCATAGTACACTGGTGGCATTGTTCTATCATTGTTCAAATAGTTCAT
 AAGAAGAATGTCAGTGTACAGTATCGAGAATATGGCCTTCATGCCGCTGGGCTTTACTTT
 TTGCTACTAGAAGTACCAGGCAGTGTAGCCAATCAAGTATCCACCCAGTGATGTTTGAC
 AAATGCATTTCAGACTCTAAAGAAGAGCTGGCCCCAGGAATCTAATTGAAATCGGAAAAGA
 AAGAAAAGAACAGCCTAAGAGCTCTCAGGCTAACCCTGGGAGGCATAGAAAAGGGGAAAAG
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 ATTTGTTTTCTGCCCGGACCTTTCTCAAATTCGAAATGCCATCTTTCACCTTTTAAAG
 AATTTTTAAGGCTTCTGCCAAAGTTTTCTTGAAGAAAAGCCACAATGTGTACAGAAT
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 TATTTGCTGTGCTCTCCCATTCATGGAGAAGGAGATAAGGTTCATCAGTTGTGTTTTCCAT
 CAAATGCTCAGTGTAAATTAATGTTAGAAGTTGGTGAAGGATCCCATCGTGCCCCCTT
 GCTGTTACCTCCAAGTCATCAACTGTAGAAAACAGGCGGTCCAGTTTATCAGCGCCCTT
 GTGGATGAATTAAGGAGAGTATATTCCAGTCGTCGATCTTACTGCAGCACATCTGT
 GCCAAGGTGGTAGATAAATCAGAGTATCGTACTTTTGCAGCCAGTCCCTAGTCCAGCTG
 CTCAGTAACTTCCTTGTGGGAATACGCTATGTTTATTGCTGGCTTTACAAATACTCC
 CGAAGTCCAAGATCCCACACCGGGTTTTACTCTTGATGTTGTCTTAGCTCTGTAGAA
 CTGCTGAAAGAGAGGTGATAACACCCTCCTTGGAGCATCAGAAGTCTTAAAGCAT
 AAGTTCCTGGTGCAGGAAATTATGTTTGATCGTTGCTTAGACAAGGCGCCTACTGTCGG



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AGCAAGGCACTGTCCAGCTTTGCACACTGTCTGGAGTTGACTGTTACCAGTGCCTCGGAG
 AGTATCCTGGAGCTCCTGATTAACAGTCCTACGTTTTCTGTAATAGAGAGTACCCTGGT
 ACCTTACTGAGAAATTCATCAGCTTTTTCTACCAAAGGCAGACATCTAACCGTTCCGAA
 CCCTCAGGGGAGATCAACATAGACAGCAGTGGTAAAACAGTTGGATCTGGAGAAAGATGT
 GTCATGGCAATGCTGAGAAGGAGGATCAGGGATGAGAAGACCAACGTTAGGAAGTCTGCA
 CTGCAGGTATTAGTGAGTATTTGAAACACTGTGATGTCTCAGGCATGAAGGAAGACCTG
 TGGATTCTGCAGGACCAGTGTCCGGACCCTGCAGTGTCTGTCCGGAAGCAGGCCCTCCAG
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 CGGGGGTGGTCCCGGTGGTGGTACTGCGAGAGCACTGTGCAGGAGAAGGCCCTGGAG
 TTCCTGGACCAGCTGCTGCTGCAGAACATCCGGCATCACAGTCATTTTCACTCTGGGGAC
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 GAGAAAATCAGCAGTCAGCAGAATCCCAATTCAAACACCTTAGGCATATTCTCTGTGTG
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 AAGCGGCTGTTTTATTGAAGGAAAGTCAAACAAGAGAGACGAATGAAAATCTACAAA
 TTTCTTCTAGAGCACTTACAGATGAACAGCGATTCAACATCACTTCCAAAATCTGCCTT
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 CTCTCAGACACGTTTGGAGTCTCAGCTCAAAGGAGATCAAGCTTTTGGCAATGAGATCT
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 GAACTCATGCACTATCTCAGGGAGGTGATGCAGGATTACCGAGATGAGCTCAAGGACTTC
 TTTGCAGTTGACAAACAGCTGGCATCAGAGCTTGAAGTATGACATGAAGAAGTACCAGGAA
 CAGCTGGTCCAGGAGCAGGAGCTAGCAAAAACATGCAGATGTGGCCGGGACGGCTGGAGGT
 GCTGAGGTGGCACCTGTGGCACAGGTTGCCCTGTGTTAGAAAACAGTGCCAGTTCCTGCT
 GGCCAAGAAAACCTGCCATGTCACCTGCCGTGAGCCAGCCCTGCACACCCAGGGCAAGT
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 CCCAAAGCCAGGCCATGTCCTGAGCACCATTGCAATCTGAATTCTGTCAAGAAAGCC
 GTGGAGTCAAAGAGCAGGCATCGGAGTCGGAGCTTAGGAGTGTGCTTCTCACTTTAAAT
 TCTGGAAGCCCAGAAAAACGTGCAGTCAGGTGTCTTCATACAGTTTGGAGCAAGAGTCG
 AATGGCGAGATTGAGCAGGTGACCAAGCGGCCATCAGCACCCCGGAGAAGAGCATCAGT
 GATGTCACGTTTGGAGCAGGGGTCAATTACATCGGGACACCACGGACTCCGTCGTGAGCC
 AAAGAGAAAAATTGAAGGCCGGAGTCAAGGAAATGACATCTTATGTTTACTGCTGCTGAT
 AAACCGCCCCACAGCCTCAGCAGTGGAAATGTGCGGTCTCCCGCCAGGAATAAGACACT
 CCAGCCTGCAGCAGGAGGTCCCTCCGAAAGACCCCTCTGAAAACAGCCAATAAACAGCC

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CCTCCCACCAGTGTCCAGGCAGGCAGGAGCCCTTGAGGAAGCAGTCTCGTGCCTCCGTG
TGAAGGCAGCTGGATCACTTCCCGCAGTCCTTGGGCAGCGCTTTGCTGTGGAACACGAGA
GCTCCTCCTCAGGGGCCTGGCACTCACCTTCTATTCTGTATGATGATTTGGTTAAACAC
TGTCAAATAATAGAGATGTGCCAGATTTAGATTTTCTTACCCTAATCTGTTAATATTGT
AACTTTATTCCATTTGAAAGTGTCAAGCCATTTCAGATAAGCTATAATCTGGTCTTTAAG
GAACACAACCTTTAAAAGTGCAGCTTTCTTTTATATAAATCAAGCCTCTGTTAACTTGAAT
TCCTTATAGTACATATTTTCCCATCTGTAATGACGAAATTTTGATTCTAATATTTTTTCT
ATTATTTATAAGTCAAATTTTTTTAAAAGTGTACAGCTTTCTAAAAGTAATAAAGGTT
TAGCATAAATACAAAAAAAAAAAAAAAAA
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Restriction Sites: Please inquire

ACCN: NM_015261

Insert Size: 5200 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 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: The ORF of this clone has been fully sequenced and the protein associated with this protein was found to match NM_015261.2 perfectly.

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_015261.2](#), [NP_056076.1](#)

RefSeq Size: 5661 bp

RefSeq ORF: 4497 bp

Locus ID: 23310

UniProt ID: [P42695](#)

Cytogenetics: 11q25

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]