

Product datasheet for **SC315872**

DNA2 (NM_001080449) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNA2 (NM_001080449) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNA2
Synonyms:	DNA2L; hDNA2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_001080449 edited
 ATGAAGACTCCCTGTATTCCCAGTCCTAAGCAAGGGAGCAAAGGCAGGGGACAGAGCCCT
 GCTGCTCAGGTGAGGGGCCACGTGGAACGCGCGCGGGAGGGGCGCCTGGCGCA
 GGTCAATTTGGGACATCTGCGGGTTGGCGCATGCGCGCGAGGTGCGCAGGCTCGCGCCTTT
 TTCCTTTTTCTAAGCTTTCTGTGTACCCTCGGTTCCGCTGTCTTTCTGTCTACAGTTT
 GCGATCCCCGCTCCAGGATGGAGCAGCTGAACGAACTGGAGCTGCTGATGGAGAAGAGT
 TTTTGGGAGGAGGCGGAGCTGCCGGCGGAGCTATTTCAGAAGAAAGTGGTAGCTTCTTT
 CCAAGAACAGTTCTGAGCACAGGAATGGATAACCGGTACCTGGTGTGGCAGTCAATACT
 GTACAGAACAAAGAGGAACTGTGAAAAGCGCCTGGTCATCACTGCTTCACAGTCACTA
 GAAAATAAAGAACTATGCATCCTTAGGAATGACTGGTGTCTGTCCAGTAGAGCCAGGA
 GATATCATTTCATTTGGAGGGAGACTGCACATCTGACACTTGGATAATAGATAAAGATTTT
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 CGATGTATGAGAAGAGCTGTCCTGAGTGAACCTTTTAGGAGCTCTGATCCAGCCACACGC
 CAAATGCTAATTGGTACGGTTCTCCATGAGGTGTTTTCAAAAAGCCATAAATAATAGCTTT
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 CCTTCGTTTTGTAATGGGCAGGAGATTCATGCATAAAAACACTTCGACTGACTTCCCT
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 TATTGTTACAAAATTGGCAATTGTGCTCTTTATAGCAGAGCAGTTGAACAACAGATGGAT
 TGTAGTTCAGTCCAATTGTGATGCTGCCAAAATAGAAGAAGAAACCCAGCATCTGAAG



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CAAACACACTTAGAATATTTTCAGCCTTTGGTGTCTAATGTTAACCCCTGGAGTCACAATCG
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TCAGAAAAATTAATCATTGATCTTCCATCAAGAGAACATGAAAGTCTTTGCCACATATTG
GGTGACTTTCAAAGAGAATAA
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_001080449
- Insert Size:** 4500 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** ORF was fully sequenced and the sequence matches to NM_001080449.1.
- 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_001080449.1](#), [NP_001073918.1](#)

RefSeq Size: 4416 bp

RefSeq ORF: 3441 bp

Locus ID: 1763

UniProt ID: [P51530](#)

Cytogenetics: 10q21.3

Protein Pathways: DNA replication

Gene Summary: This gene encodes a member of the DNA2/NAM7 helicase family. The encoded protein is a conserved helicase/nuclease involved in the maintenance of mitochondrial and nuclear DNA stability. Mutations in this gene are associated with autosomal dominant progressive external ophthalmoplegia-6 (PEOA6) and Seckel syndrome 8. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2014]
Transcript Variant: This variant (1) represents the longer transcript and encodes the functional protein.