

## Product datasheet for **SC324542**

### DNase I (DNASE1) (NM\_005223) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNase I (DNASE1) (NM_005223) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNase I
Synonyms:	DNL1; DRNI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_005223.3  
 TCAGAGACCTTTCTTCATAGACTACTTTTTTTTTCTTTAAGCAGCAAAAGGAGAAAATTGT  
 CATCAAAGGATATTCAGATTCTTGACAGCATTCTCGTCATCTCTGAGGACATCACCATC  
 ATCTCAGGATGAGGGGCATGAAGCTGCTGGGGCGCTGCTGGCACTGGCGGCCCTACTGC  
 AGGGGGCCGTGTCCCTGAAGATCGCAGCCTTCAACATCCAGACATTTGGGGAGACCAAGA  
 TGTCCAATGCCACCCTCGTCAGCTACATTGTGCAGATCCTGAGCCGCTATGACATCGCCC  
 TGGTCCAGGAGGTGAGAGACAGCCACTGACTGCCGTGGGGAAGCTGCTGGACAACCTCA  
 ATCAGGATGCACCAGACACCTATCACTACGTGGTCAGTGAGCCACTGGGACGGAACAGCT  
 ATAAGGAGCGCTACCTGTTTCGTGTACAGGCCTGACCAGGTGTCTGCGGTGGACAGCTACT  
 ACTACGATGATGGCTGCGAGCCCTGCGGGAACGACACCTTCAACCGAGAGCCAGCCATTG  
 TCAGGTTCTTCTCCCGTTTACAGAGGTCAGGGAGTTTGCCATTGTTCCCTGCATGCGG  
 CCCCAGGGGACGAGTAGCCGAGATCGACGCTCTCTATGACGTCTACCTGGATGTCCAAG  
 AGAAATGGGGCTTGGAGGACGTCATGTTGATGGGCGACTTCAATGCGGGCTGCAGCTATG  
 TGAGACCTCCCAGTGGTCATCCATCCGCCTGTGGACAAGCCCCACCTTCCAGTGGCTGA  
 TCCCCGACAGCGCTGACACCACAGCTACACCCACGCACTGTGCCTATGACAGGATCGTGG  
 TTGCAGGGATGCTGCTCCGAGGCGCCGTTGTTCCCGACTCGGCTCTTCCCTTTAACTTCC  
 AGGCTGCCTATGGCCTGAGTGACCAACTGGCCCAAGCCATCAGTGACCACTATCCAGTGG  
 AGGTGATGCTGAAGTGAGCAGCCCTCCCCACACCACTGAACTGCAGGAAGAGAGGACC  
 CATCTTGCCACAGGACCCAGAAAAAAGCCCAACACACACTCGGGTTAAGAAATACCTTT  
 AAATTTAGGTAATAAAGCTCAAGGAGGTGGGGCTGTCTAAAAAAAAAAAAAAAAAAAAA  
 AAAAAAAAAA

Restriction Sites:	Please inquire
ACCN:	NM_005223



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**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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_005223.3](#), [NP\\_005214.2](#)

**RefSeq Size:** 3108 bp

**RefSeq ORF:** 849 bp

**Locus ID:** 1773

**UniProt ID:** [P24855](#)

**Cytogenetics:** 16p13.3

**Domains:** Exo\_endo\_phos, DNaseIc

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Gene Summary:**

This gene encodes a member of the DNase family. This protein is stored in the zymogen granules of the nuclear envelope and functions by cleaving DNA in an endonucleolytic manner. At least six autosomal codominant alleles have been characterized, DNASE1\*1 through DNASE1\*6, and the sequence of DNASE1\*2 represented in this record. Mutations in this gene have been associated with systemic lupus erythematosus (SLE), an autoimmune disease. A recombinant form of this protein is used to treat the one of the symptoms of cystic fibrosis by hydrolyzing the extracellular DNA in sputum and reducing its viscosity. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008]