

Product datasheet for RC205927

DNase I (DNASE1) (NM_005223) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNase I (DNASE1) (NM_005223) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNase I
Synonyms:	DNL1; DRNI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205927 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAGGGGCATGAAGCTGCTGGGGGCGCTGCTGGCACTGGCGGCCCTACTGCAGGGGGCCGTGTCCCTGA
 AGATCGCAGCCTTCAACATCCAGACATTTGGGGAGACCAAGATGTCCAATGCCACCCTCGTCAGCTACAT
 TGTGCAGATCCTGAGCCGCTATGACATCGCCCTGGTCCAGGAGGTCAGAGACAGCCACCTGACTGCCGTG
 GGAAGCTGCTGGACAACCTCAATCAGGATGCACCAGACACCTATCACTACGTGGTCAGTGAGCCACTGG
 GACGGAACAGCTATAAGGAGCGCTACCTGTTCTGTACAGGCCTGACCAGGTGTCTGCGGTGGACAGCTA
 CTACTACGATGATGGCTGCGAGCCCTGCGGGAACGACACCTTCAACCGAGAGCCAGCCATTGTGAGGTTT
 TTCTCCCGGTTTACAGAGGTGAGGAGTTTGCCATTGTTCCCTGCATGCGGCCCGGGGACGCGAGTAG
 CCGAGATCGACGCTCTCTATGACGTCTACCTGGATGTCCAAGAGAAATGGGGCTTGGAGGACGTCATGTT
 GATGGGCGACTTCAATGCGGGGCTGCAGCTATGTGAGACCCTCCAGTGGTCATCCATCCGCTGTGGACA
 AGCCCCACCTTCCAGTGGCTGATCCCCGACAGCGCTGACACCACAGCTACACCCACGCACTGTGCCTATG
 ACAGGATCGTGGTTGCAGGATGCTGCTCCGAGGCGCGTTGTTCCCGACTCGGCTCTTCCCTTTAACTT
 CCAGGTCGCTATGGCCTGAGTGACCAACTGGCCCAAGCCATCAGTGACCACTATCCAGTGGAGGTGATG
 CTGAAG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC205927 protein sequence
 Red=Cloning site Green=Tags(s)

MRGMKLLGALLALAALLQGAVSLKIAAFNIQTFGETKMSNATLVSYIVQILSRDYIALVQEVDRDHLTAV
 GKLLDNLNQDAPDTYHYVSEPLGRNSYKERYLFVYRPDQVSADVSYDDGCEPCGNDTFNREPAIVRF
 FSRFTEVREFAIVPLHAAPGDAVAEIDALYDVYLDVQEKWGLEDMVMGDFNAGCSYVRPSQWSSIRLWT
 SPTFQWLIPDSADTTATPTHCAYDRIVVAGMLLRGAVVPDSALPFNFQAAYGLSDQLAQAI SDHYPVEVM
 LK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6069_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005223

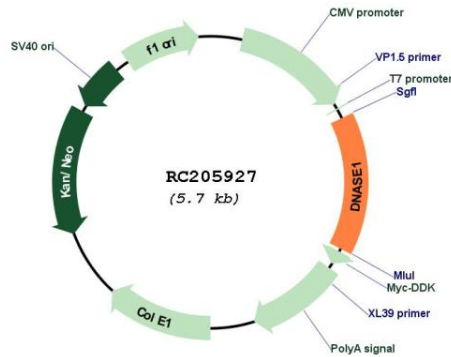
ORF Size: 846 bp

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.

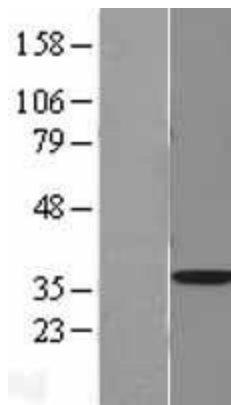
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:	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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_005223.3, NP_005214.2</u>
RefSeq Size:	3108 bp
RefSeq ORF:	849 bp
Locus ID:	1773
UniProt ID:	<u>P24855</u>
Cytogenetics:	16p13.3
Domains:	Exo_endo_phos, DNaseIc
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
MW:	31.4 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC205927



Western blot validation of overexpression lysate (Cat# [LY401601]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205927 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).