

Product datasheet for **MC201502**

Dnase1 (NM_010061) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dnase1 (NM_010061) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dnase1
Synonyms: A1788650; DNase1; Dnl1
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC014718 sequence for NM_010061
AGCGACCCTGAGAGCTAGCAGGTCTGTAATTCACACTGCTTTTTGGTTTTTTCCTTTATACATTTTGTA
AAAAGAATCTTCCTTTAAAAGCAAAGGAGAAAATATATATCAGAATTTTCCAGGTAGTATCAGAATTCT
CATCATCTCTGTAGACATCTCTGTGAGTGTGAGGTGTTGAGTGAACCTCACCTTGTCATCCAGTCCAGT
GCAGACTCGGGGCTCATCATAAGAGCAGGTCTGTTCTGACTGCTGCAGCCGCTCAGATTGGCTTTCA
GGATGCGGTACACAGGGCTAATGGGAACACTGCTCACCTTGGTCAACCTGCTGCAGCTGGCTGGACTCT
GAGAATTGCAGCCTTCAACATTCGGACTTTTGGGAGACTAAGATGTCCAATGCTACCCTCTCTGTATAC
TTTGTGAAAATCCTGAGTCGCTATGACATCGCTGTTATCCAAGAGGTGAGAGACTCCACCTGGTTGCTG
TTGGGAAGCTCCTGGATGAACCTCAATCGGGACAAACCTGACACCTACCGCTATGTAGTCAGTGAGCCGCT
GGGCCGTAAGGCTACAAGGAACAGTACCTTTTTGTGTACAGGCCTGACCAGGTGTCTATTCTGGACAGC
TATCAATATGATGATGGCTGTGAACCTGTGAAATGACACCTTCAGCAGAGAGCCAGCCATTGTTAAGT
TCTTTTCCCACACTGAGGTCCAAGAATTTGCGATCGTGCCCTTGATGCAGCCCAACAGAAGCTGT
GAGTGAGATCGAGCCCTCTACGATGTTTACCTAGATGTCTGGCAAAAGTGGGGCCTGGAGGACATCATG
TTCATGGGAGACTTCAATGCTGGCTGCAGCTACGTCACCTCCTCCAGTGGTCTCCATTGCGCTTCGGA
CAAGCCCCATCTCCAGTGGCTGATCCCTGACAGTGGGACACCACAGTCACATCAACACTGTGCTTA
TGACAGGATTGTGGTGGCTGGAGCTCTGCTCCAGGCTGCTGTTGTTCCAACTCGGCTGTTCTTTTGTG
TTCCAAGCAGAATACAGACTTTCCAACCAGCTGGCTGAAGCCATCAGTGACCATTACCCAGTGGAGGTGA
CACTCAGAAAAATCTGATGTCATTGAGCAGTTCAGCCATACTGCTTCTGGTGAGGAAGAATCCACTTCAA
CTCTATTTGGTACTACAGCATTCCACCTCTCGCAACAGAGAAAAACGCTGCCACGGGCGCTAAGAAATA
CTGTTTAATTGAAGTAAATAAAGGAGAGCTCAAGCAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI
ACCN: NM_010061
Insert Size: 855 bp



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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).
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.
RefSeq:	BC014718 , AAH14718
RefSeq Size:	1312 bp
RefSeq ORF:	855 bp
Locus ID:	13419
UniProt ID:	P49183
Cytogenetics:	16 2.37 cM
Gene Summary:	Serum endonuclease secreted into body fluids by a wide variety of exocrine and endocrine organs (PubMed:29191910). Expressed by non-hematopoietic tissues and preferentially cleaves protein-free DNA. Among other functions, seems to be involved in cell death by apoptosis. Binds specifically to G-actin and blocks actin polymerization (By similarity). Together with DNASE1L3, plays a key role in degrading neutrophil extracellular traps (NETs) (PubMed:29191910). NETs are mainly composed of DNA fibers and are released by neutrophils to bind pathogens during inflammation (PubMed:29191910). Degradation of intravascular NETs by DNASE1 and DNASE1L3 is required to prevent formation of clots that obstruct blood vessels and cause organ damage following inflammation (PubMed:29191910). [UniProtKB/Swiss-Prot Function]