

Product datasheet for **RG209573**

DNase II (DNASE2) (NM_001375) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNase II (DNASE2) (NM_001375) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DNase II
Synonyms:	DNASE2A; DNL; DNL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209573 representing NM_001375 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCCCCTGCTGCTGGCAGCGCTGCTGTGCGTCCCCGCCGGGGCCCTGACCTGCTACGGGGACTCCG
GGCAGCCTGTAGACTGGTTCGTGGTCTACAAGCTGCCAGCTCTTAGAGGGTCCGGGGAGGCGCGCAGAG
AGGGCTGCAGTACAAGTATCTGGACGAGAGCTCCGGAGGCTGGCGGGACGGCAGGGCACTCATCAACAGC
CCGGAGGGGGCCGTGGCCGAAGCCTGCAGCCGCTGTACCGGAGCAACACCAGCCAGCTCGCCTTCTGCT
TCTACAATGACCAACCGCCTCAACCCAGCAAGGCTCAGGACTCTCCATGCGTGGGCACACGAAGGGTGT
CCTGCTCCTTGACCAGATGGGGCTTCTGGCTGGTCCACAGTGTACCTAACTTCCTCCACCGGCCTCC
TCTGCTGCATACAGCTGGCCTCATAGCGCCTGTACCTACGGGCAGACCCTGCTCTGTGTCTTTTTCCCT
TCGCTCAGTTCTCGAAGATGGGCAAGCAGCTGACCTACACCTACCCTGGGTCTATAACTACCAGCTGGA
AGGGATCTTTGCCAGGAATCCCCGACTTGGAGAATGTGGTCAAGGGCCACCAGTTAGCCAAGAACC
TGAACAGCAGCATCACACTCACATCCCAGGCCGGGGCTGTTTTCCAGAGCTTTGCCAAGTTCAGCAAAT
TTGGAGATGACCTGTACTCCGGCTGGTTGGCAGCAGCCCTGGTACCAACCTGCAGGTCCAGTCTGGCA
CAAACCTGTAGGCATCCTGCCCTCTAACTGCTCGGATATCTGGCAGGTTCTGAATGTGAACCAATAGCT
TTCCCTGGACCAGCCGGCCCAAGCTTCAACAGCACAGAGGACCACTCAAATGGTGGCTGTCCCCAAAAG
GGCCTGGACCTGCGTGGGTGACATGAATCGGAACAGGAGAGGAGCAACGGGGTGGGGGCACACTGTG
TGCCAGCTGCCAGCCCTCTGAAAGCCTTCCAGCCGCTGGTGAAGAAGTACCAGCCCTGTAAATGGCATG
GCCAGGAAGCCCAGCAGAGCTTATAAGATC

ACGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209573 representing NM_001375
 Red=Cloning site Green=Tags(s)

MIPLLLAALLCVPAGALTCYGDSGQPVDFVYKLPALRGSGEAAQRGLQYKYLDESSGGWRDGRALINS
 PEGAVGRSLQPL YRSNTSQLAFLLYNDQPPQPSKAQDSSMRGHTKGVLLLDHDGGFWLVHSVPNFPPAS
 SAAYSWPHSACTYGTLLCVSFPFAQFSKMGKQLTYTYPWVYNYQLEGIFAQEFPDLENNVKGHHVSQEP
 WNSSITLTSQAGAVFQSF AKFSKFGDDL YSGWLAALGTNLQVQFVHKT VGI LPSNCSDIWQVLNVNQIA
 FPGPAGPSFNSTEDHSKWCVSPKGPWTCVGMNRNQEGEEQRGGGTLCAQLPALWKAFQPLVKNYQPCNGM
 ARKPSRAYKI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001375

ORF Size: 1080 bp

OTI Disclaimer: 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:

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_001375.3](#)

RefSeq Size: 2011 bp

RefSeq ORF: 1083 bp

Locus ID: 1777

UniProt ID: [O00115](#)

Cytogenetics: 19p13.13

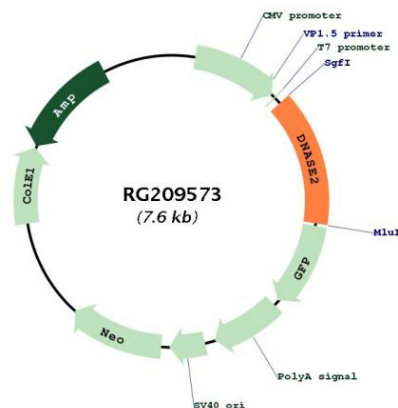
Domains: DNase_II

Protein Families: Druggable Genome

Protein Pathways: Lysosome

Gene Summary: This gene encodes a member of the DNase family. The protein, located in the lysosome, hydrolyzes DNA under acidic conditions and mediates the breakdown of DNA during erythropoiesis and apoptosis. Two codominant alleles have been characterized, DNASE2*L (low activity) and DNASE2*H (high activity), that differ at one nucleotide in the promoter region. The DNASE2*H allele is represented in this record. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG209573