

New England Biolabs Certificate of Analysis

Product Name: Ddel
Catalog Number: R0175S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10061776
Expiration Date: 08/2021
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0175S/L v1.0

Ddel Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0175SVIAL	Ddel	10050566	Pass
B7204SVIAL	CutSmart® Buffer	10061302	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10059230	Pass

Assay Name/Specification	Lot # 10061776
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Ddel, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Ddel.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 30 units of Ddel incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 10 Units of Ddel incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

This product has been tested and shown to be in compliance with all specifications.



Jianying Luo
Production Scientist
15 Aug 2019



Jay Minichiello
Packaging Quality Control Inspector
03 Feb 2020