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New England Biolabs Certificate of Analysis

Product Name: Drdl
Catalog Number: R0530S
Concentration: 5,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Lot Number: 10043457
Expiration Date: 05/2021
Storage Temperature: -20°C

Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 200 µg/ml BSA

Specification Version: PS-R0530S/L v2.0

Drdl Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0530SVIAL	Drdl	10043458	Pass	
B7204SVIAL	CutSmart® Buffer	10046087	Pass	

Assay Name/Specification	Lot # 10043457
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pUC19 DNA with DrdI, ~75% 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 DrdI.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of Drdl 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 pUC19 DNA and a minimum of 25 Units of DrdI 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.



R0530S / Lot: 10043457

Anthony Francis
Production Scientist
30 Apr 2019

Jay Minichiello

Packaging Quality Control Inspector

15 Aug 2019