

New England Biolabs Certificate of Analysis

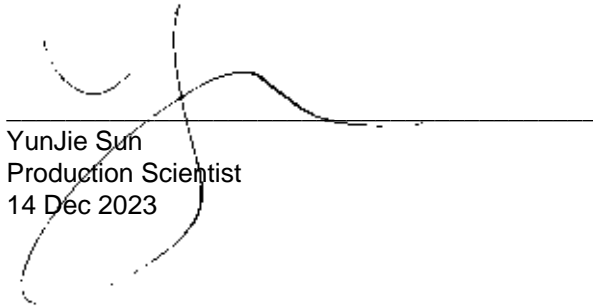
Product Name: *DrdI*
Catalog Number: *R0530S*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10226120*
Expiration Date: *12/2025*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA (pH 7.4 @ 25°C)*
Specification Version: *PS-R0530S/L v3.0*

DrdI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0530SVIAL	DrdI	10221062	Pass
B6004SVIAL	rCutSmart™ Buffer	10224841	Pass

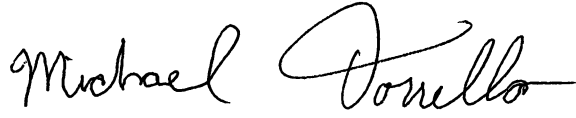
Assay Name/Specification	Lot # 10226120
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of DrdI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
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
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pUC19 DNA and a minimum of 30 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.

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YunJie Sun
Production Scientist
14 Dec 2023



Michael Tonello
Packaging Quality Control Inspector
15 Feb 2024