

New England Biolabs Certificate of Analysis

Product Name: *DrdI*
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.*
Packaging Lot Number: *10062058*
Expiration Date: *12/2021*
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*

DrdI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0530SVIAL	DrdI	10061521	Pass
B7204SVIAL	CutSmart® Buffer	10055737	Pass

Assay Name/Specification	Lot # 10062058
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 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.



Anthony Francis
Production Scientist
17 Dec 2019



Jay Minichiello
Packaging Quality Control Inspector
20 Dec 2019