New England Biolabs
Certificate of Analysis

Product Name:	*DrdI*
Catalog Number:	*R0530L*
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:	*10092119*
Expiration Date:	*12/2022*
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**
R0530LVIAL	DrdI	10092120	**Pass**
B7204SVIAL	CutSmart® Buffer	10091029	**Pass**

Assay Name/Specification	Lot # 10092119
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 16ºC. 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 DrdI incubated for 4 hours at 37ºC 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 37ºC 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

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Penghua Zhang
Production Scientist
10 Dec 2020

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Josh Hersey
Packaging Quality Control Inspector
10 Dec 2020

R0530L / Lot: 10092119