

New England Biolabs Certificate of Analysis

Product Name: DralIII-HF[®]
Catalog Number: R3510S
Concentration: 20,000 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: 10074683
Expiration Date: 05/2022
Storage Temperature: -20°C
Storage Conditions: 20 mM Tris-HCl, 300 mM NaCl, 1 mM Dithiothreitol, 0.1 mM EDTA, 200 µg/ml BSA, 50% Glycerol, pH 7.4 @ 25°C
Specification Version: PS-R3510S/L v1.0

DralIII-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3510SVIAL	DralIII-HF [®]	10074682	Pass
B7204SVIAL	CutSmart [®] Buffer	10074633	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10071081	Pass

Assay Name/Specification	Lot # 10074683
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 200 units of DralIII-HF [™] 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 Lambda DNA with DralIII-HF [™] , ~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 DralIII-HF [™] .	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart [™] Buffer containing 1 µg of Lambda DNA and a minimum of 20 Units of DralIII-HF [™] incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) DralIII-HF [™] is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



Penghua Zhang
Production Scientist
18 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
18 Jun 2020