

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.
Lot Number: 10030799
Expiration Date: 01/2021
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

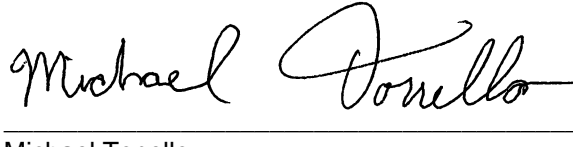
DralIII-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3510SVIAL	DralIII-HF [®]	10030798	Pass
B7204SVIAL	CutSmart [®] Buffer	10031565	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10021137	Pass

Assay Name/Specification	Lot # 10030799
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.



Tony Spear-Alfonso
Production Scientist
19 Dec 2018



Michael Tonello
Packaging Quality Control Inspector
15 Jan 2019