

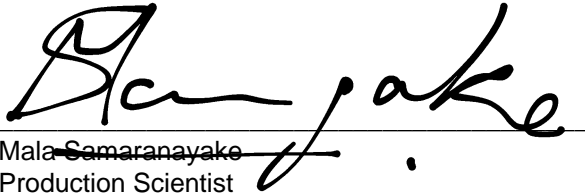
New England Biolabs Certificate of Analysis

Product Name: CviAll
Catalog Number: R0640L
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 25°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10062985
Expiration Date: 12/2020
Storage Temperature: -20°C
Storage Conditions: 10 mM Tris-HCl, 250 mM NaCl, 10 mM TCEP-HCl, 1 mM DTT, 0.1 mM EDTA, 0.15% Triton®X-100, 50% Glycerol, 200 µg/ml BSA, (pH 7.4 @ 25°C)
Specification Version: PS-R0640S/L v2.0

CviAll Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0640LVIAL	CviAll	10062984	Pass
B7204SVIAL	CutSmart® Buffer	10055736	Pass

Assay Name/Specification	Lot # 10062985
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 10 units of CviAll incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pUC19 DNA with CviAll, >95% 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 CviAll.	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 CviAll incubated for 16 hours at 25°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.



Mala Samaranayake
Production Scientist
13 Dec 2019



Michael Tonello
Packaging Quality Control Inspector
16 Dec 2019