

New England Biolabs Certificate of Analysis

Product Name: *Taq(alpha)I*
Catalog Number: *R0149S*
Concentration: *20,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 .g of Lambda DNA in 1 hour at 65°C in a total reaction volume of 50 .l.*
Lot Number: *10022849*
Expiration Date: *09/2020*
Storage Temperature: *-20°C*
Storage Conditions: *300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA*
Specification Version: *PS-R0149S/L v1.0*

Taq(alpha)I Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0149SVIAL	Taq(alpha)I	10021415	Pass
B7204SVIAL	CutSmart® Buffer	10018445	Pass

Assay Name/Specification	Lot # 10022849
<p>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 200 units of TaqαI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA DNA with TaqαI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 25°C. Of these ligated fragments, >95% can be recut with TaqαI.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA DNA and a minimum of 200 Units of TaqαI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass

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



Tony Spear-Alfonso
Production Scientist
05 Sep 2018



Michael Tonello
Packaging Quality Control Inspector
03 Oct 2018