

New England Biolabs Certificate of Analysis

Product Name: *SnaBI*
Catalog Number: *R0130L*
Concentration: *5,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of T7 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Lot Number: *10043582*
Expiration Date: *05/2021*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0130S/L v1.0*

SnaBI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0130LVIAL	SnaBI	10043583	Pass
B7204SVIAL	CutSmart® Buffer	10042783	Pass

Assay Name/Specification	Lot # 10043582
<p>Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 Units of SnaBI incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<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 50 units of SnaBI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of T7 DNA with SnaBI, >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 SnaBI.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of T7 DNA and a minimum of 5 units of SnaBI incubated for 16 hours at 37°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.



Doreen Duquette
Production Scientist
24 Apr 2019



Michael Tonello
Packaging Quality Control Inspector
15 May 2019