

New England Biolabs Certificate of Analysis

Product Name: *SnaBI*
Catalog Number: *R0130S*
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.*
Packaging Lot Number: *10076092*
Expiration Date: *06/2022*
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
R0130SVIAL	SnaBI	10076096	Pass
B7204SVIAL	CutSmart® Buffer	10075569	Pass

Assay Name/Specification	Lot # 10076092
<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
<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>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>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

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



Penghua Zhang
Production Scientist
30 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
30 Jun 2020