

New England Biolabs Certificate of Analysis

Product Name: *AbaSI*
Catalog Number: *R0665S*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of T4 wild-type phage DNA (fully ghmC-modified) in 1 hour at 25°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10205103*
Expiration Date: *08/2025*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl , 100 mM KCl , 1 mM DTT , 0.1 mM EDTA , 0.5 % Tween® 20 , 0.5 % IGEPAL® CA-630 , 50 % Glycerol, (pH 7.4 @ 25°C)*
Specification Version: *PS-R0665S v3.0*

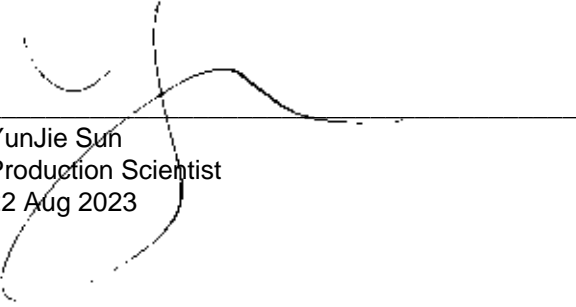
AbaSI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0665SVIAL	AbaSI	10205104	Pass
B6004SVIAL	rCutSmart™ Buffer	10198644	Pass
B0706SVIAL	10X DTT	10191226	Pass

Assay Name/Specification	Lot # 10205103
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled pBR322 DNA and a minimum of 30 units of AbaSI incubated for 4 hours at 25°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
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 100 units of AbaSI incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of PhiX174-HaeIII DNA and a minimum of 50 units of AbaSI incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE)	Pass

Assay Name/Specification	Lot # 10205103
AbaSI is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



YunJie Sun
Production Scientist
22 Aug 2023



Michael Tonello
Packaging Quality Control Inspector
24 Aug 2023