

New England Biolabs Certificate of Analysis

Product Name: **AbaSI**
Catalog #: **R0665S**
Concentration: **10,000 units/ml**
Unit Definition: **One unit is defined as the amount of enzyme required to digest 1 µg of T4 wild-type phage DNA (fully gbmC-modified) in 1 hour at 25°C in a total reaction volume of 50 µl.**
Lot #: **0021802**
Assay Date: **02/2018**
Expiration Date: **2/2020**
Storage Temp: **-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 v2.0**
Effective Date: **25 Jan 2016**

Assay Name/Specification (minimum release criteria)	Lot #0021802
Endonuclease Activity (Nicking) - A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled pBR322 dcm+ DNA and a minimum of 30 units of AbaSI incubated for 4 hours at 16°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] <i>E. coli</i> DNA and a minimum of 100 units of AbaSI incubated for 4 hours at 37°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 T4 GT7 (dC) 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) - AbaSI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass



Authorized by
Derek Robinson
25 Jan 2016



Inspected by
Mala Samaranayake
21 Mar 2018

