

New England Biolabs Certificate of Analysis

Product Name: *Diluent A (with rAlbumin)*
Catalog Number: *B8532S*
Concentration: *1 X Concentrate*
Packaging Lot Number: *10240160*
Expiration Date: *02/2027*
Storage Temperature: *-20°C*
Specification Version: *PS-B8532S v1.0*
Composition (1X): *10 mM Tris-HCl , 50 mM KCl , 1 mM DTT , 0.1 mM EDTA , 200 µg/ml rAlbumin , 50 % Glycerol, (pH 7.4 @ 25°C)*

Diluent A (with rAlbumin) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B8532SVIAL	Diluent A (with rAlbumin)	10240157	Pass

Assay Name/Specification	Lot # 10240160
<p>Endonuclease Activity (Nicking) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Diluent A (with rAlbumin) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of PhiX174-HaeIII DNA and a minimum of 10 µl of Diluent A (with rAlbumin) 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>RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Diluent A (with rAlbumin) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p>pH (buffers/solutions) The pH of 1X Diluent A (with rAlbumin) is between pH 7.3 and 7.5 at 25°C.</p>	Pass
<p>qPCR DNA Contamination (E. coli Genomic)</p>	Pass

Assay Name/Specification	Lot # 10240160
<p>A minimum of 1 µl of Diluent A (with rAlbumin) is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.</p>	

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

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Nancy Considine
Production Scientist
03 May 2024



Josh Hersey
Packaging Quality Control Inspector
06 May 2024