

New England Biolabs Certificate of Analysis

Product Name: SexAI
Catalog Number: R0605L
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBC4 DNA (dcm-) in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10223285
Expiration Date: 12/2025
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0605S/L v1.0

SexAI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0605LVIAL	SexAI	10223286	Pass
B6004SVIAL	rCutSmart™ Buffer	10224839	Pass

Assay Name/Specification	Lot # 10223285
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 15 units of SexAI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBC4 dcm- DNA with SexAI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with SexAI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBC4 dcm- DNA and a minimum of 15 Units of SexAI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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.


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22 Dec 2023


Michael Tonello

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02 Feb 2024