

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.
Lot Number: 10050802
Expiration Date: 07/2021
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	10050801	Pass
B7204SVIAL	CutSmart® Buffer	10047860	Pass

Assay Name/Specification	Lot # 10050802
<p>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.</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 15 units of SexAI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>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.</p>	Pass

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



Doreen Duquette
Production Scientist
20 Jun 2019



Jay Minichiello
Packaging Quality Control Inspector
08 Aug 2019