

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

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: 10168872
Expiration Date: 10/2024
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

SexAl Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0605LVIAL	SexAl	10168871	Pass	
B6004SVIAL	rCutSmart™ Buffer	10164465	Pass	

Assay Name/Specification	Lot # 10168872
Ligation and Recutting (Terminal Integrity)	Pass
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.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBC4 dcm- DNA and a minimum of 15 Units of SexAl incubated for 16 hours at 37°C results in a DNA pattern free of	
detectable nuclease degradation as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
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 SexAl incubated for 4	
hours at 37°C releases <0.1% of the total radioactivity.	

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.



R0605L / Lot: 10168872 Page 1 of 2 YunJie Sun \
Production Scientist 25 Oct 2022

NEW ENGLAND

Michael Tonello

Packaging Quality Control Inspector

31 Oct 2022

Page 2 of 2