

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: R0605S

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: 10064377
Expiration Date: 01/2022
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				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0605SVIAL	SexAl	10064378	Pass	
B7204SVIAL	CutSmart® Buffer	10068805	Pass	

Assay Name/Specification	Lot # 10064377
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.	
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.	
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.



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**Production Scientist** 13 Jan 2020

Mary Conlon
Packaging Quality Control Inspector

24 Mar 2020

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