

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: Kasl
Catalog Number: R0544S
Concentration: 5,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of pBR322 DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10068139
Expiration Date: 01/2021
Storage Temperature: -20°C

Storage Conditions: 500 mM KCl, 20 mM Tris-HCl (pH 7.0), 0.1 mM EDTA, 1mM MgCl2, 50%

Glycerol, 0.10% Triton X-100, 200 µg/ml BSA

Specification Version: PS-R0544S/L v2.0

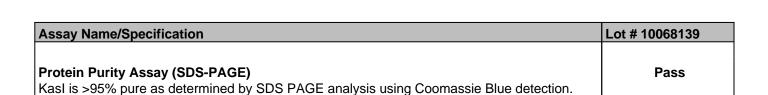
Kasl Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0544SVIAL	Kasl	10064418	Pass	
B7204SVIAL	CutSmart® Buffer	10071077	Pass	

Assay Name/Specification	Lot # 10068139
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pBR322 DNA with KasI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with KasI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBR322 DNA and a minimum of 5 Units of Kasl incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Blue-White Screening (Terminal Integrity) A sample of LITMUS38i vector linearized with a 10-fold excess of Kasl, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.	Pass
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 5 units of Kasl incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass



R0544S / Lot: 10068139

Page 1 of 2



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

Penghua Zhang Production Scientist

16 Apr 2020

Minichiello

Packaging Quality Control Inspector

16 Apr 2020

