

New England Biolabs Certificate of Analysis

Product Name: *FatI*
Catalog Number: *R0650S*
Concentration: *2,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 55°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10131052*
Expiration Date: *12/2023*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0650S/L v1.0*

FatI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0650SVIAL	FatI	10131051	Pass
B6002SVIAL	NEBuffer™ r2.1	10102965	Pass

Assay Name/Specification	Lot # 10131052
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2.1 containing 1 µg of pUC19 DNA and a minimum of 10 Units of FatI incubated for 16 hours at 55°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pUC19 DNA with FatI, >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 FatI.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 10 units of FatI incubated for 4 hours at 55°C releases <0.1% of the total radioactivity.	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.



Penghua Zhang
Production Scientist
10 Jan 2022



Michael Tonello
Packaging Quality Control Inspector
10 Jan 2022