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New England Biolabs Certificate of Analysis

Product Name: Sfcl
Catalog Number: R0561S
Concentration: 10,000 U/ml

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

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

Packaging Lot Number: 1009213
Expiration Date: 12/2022
Storage Temperature: -20°C

Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 500 µg/ml BSA

Specification Version: PS-R0561S/L v1.0

SfcI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0561SVIAL	Sfcl	10092132	Pass	
B7204SVIAL	CutSmart® Buffer	10091029	Pass	

Assay Name/Specification	Lot # 10092133
Non-Specific DNase Activity (16 hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of	
10 Units of SfcI incubated for 16 hours at 37°C results in a DNA pattern free of	
detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE:	
although no nuclease degradation is detected under these conditions, extended	
incubations and/or high concentrations of this enzyme may result in star activity.	
See the product FAQ for recommended reaction conditions for this enzyme.	
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 50 units of SfcI incubated for 4	
hours at 37°C releases <0.1% of the total radioactivity.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 2-fold over-digestion of Lambda DNA with Sfcl, >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 Sfcl.	

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



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09 Dec 2020

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Packaging Quality Control Inspector

09 Dec 2020

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