

## New England Biolabs Certificate of Analysis

**Product Name:** ScrFI  
**Catalog Number:** R0110S  
**Concentration:** 5,000 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.  
**Lot Number:** 10025314  
**Expiration Date:** 10/2020  
**Storage Temperature:** -20°C  
**Storage Conditions:** 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA  
**Specification Version:** PS-R0110S/L v1.0

ScrFI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0110SVIAL	ScrFI	10021623	Pass
B7204SVIAL	CutSmart® Buffer	10018444	Pass

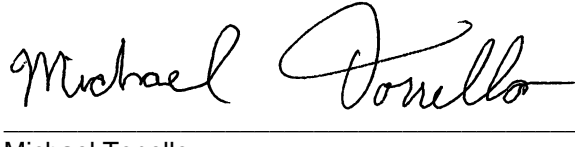
Assay Name/Specification	Lot # 10025314
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 15 units of ScrFI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 2-fold over-digestion of Lambda DNA with ScrFI, 95% can be recut with ScrFI.	Pass
<b>Non-Specific DNase Activity (16 hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 5 Units of ScrFI 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.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> ScrFI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



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Tony Spear-Alfonso  
Production Scientist  
17 Sep 2018



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Michael Tonello  
Packaging Quality Control Inspector  
12 Oct 2018