

New England Biolabs Certificate of Analysis

Product Name: Spel-HF[®]
Catalog Number: R3133L
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pXba-XbaI DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Lot Number: 10050192
Expiration Date: 04/2021
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-R3133S/L v2.0

Spel-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3133LVIAL	Spel-HF [®]	10042381	Pass
B7204SVIAL	CutSmart [®] Buffer	10043913	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10043909	Pass

Assay Name/Specification	Lot # 10050192
Blue-White Screening (Terminal Integrity) A sample of LITMUS28 vector linearized with a 10-fold excess of Spel-HF [®] , religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart [®] Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 60 units of Spel-HF [®] incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart [®] Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of Spel-HF [®] incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of T7 DNA with Spel-HF [®] , >95% of the DNA fragments	Pass

