

## New England Biolabs Certificate of Analysis

**Product Name:** *Scs PUS1*  
**Catalog Number:** *M0526S*  
**Concentration:** *100 pmol/μl*  
**Packaging Lot Number:** *10184218*  
**Expiration Date:** *03/2025*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *200 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.4 @ 25°C)*  
**Specification Version:** *PS-M0526S v1.0*

Scs PUS1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0526SVIAL	Scs PUS1	10179326	Pass
B6001SVIAL	NEBuffer™ r1.1	10154035	Pass

Assay Name/Specification	Lot # 10184218
<p><b>Endonuclease Activity (Nicking)</b> A 50 μl reaction in NEBuffer 1.1 containing 1 μg of supercoiled PhiX174 DNA and a minimum of 5 μl of Scs PUS1 incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	<b>Pass</b>
<p><b>Functional Testing (Scs PUS1)</b> A 100 μl reaction in NEBuffer 1.1 containing 85 pmol RNA 5'-AGAGAUCUAUUUUUGGCAAUCAAAUCGGGAUCCGGAUA-3' and 100 pmol Scs PUS1 incubated for 2 hours at 30 °C results in ≥15% conversion of U to pseudoU as determined by nucleoside digestion and mass spectrometry analysis.</p>	<b>Pass</b>
<p><b>Protein Purity Assay (SDS-PAGE)</b> Scs PUS1 is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	<b>Pass</b>
<p><b>RNase Activity Assay (4 Hour Digestion)</b> A 10 μl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 μl of Scs PUS1 is incubated at 37°C. After incubation for 4 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	<b>Pass</b>

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](http://www.neb.com/trademarks) for additional information.



---

Jenna Ware  
Production Scientist  
24 Mar 2023



---

Michael Tonello  
Packaging Quality Control Inspector  
24 Mar 2023