

## New England Biolabs Certificate of Analysis

**Product Name:** hSMUG1  
**Catalog Number:** M0336S  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to excise 1 pmol of deoxyuracil from a 34-mer oligonucleotide duplex containing a single dU site in a total reaction volume of 10 µl in 1 hour at 37°C.  
**Packaging Lot Number:** 10180910  
**Expiration Date:** 01/2025  
**Storage Temperature:** -20°C  
**Storage Conditions:** 10 mM Tris-HCl, 250 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.15 % Triton®X-100, 200 µg/ml BSA, (pH 7.4 @ 25°C)  
**Specification Version:** PS-M0336S/L v1.0

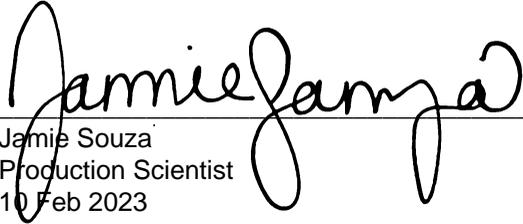
hSMUG1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0336SVIAL	hSMUG1	10176091	Pass
B9200SVIAL	Recombinant Albumin, Molecular Biology G	10173665	Pass
B7001SVIAL	NEBuffer™ 1	10150375	Pass

Assay Name/Specification	Lot # 10180910
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of hSMUG1 incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 1 containing 1 µg of Lambda-HindIII DNA and a minimum of 50 units of hSMUG1 incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> hSMUG1 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.

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.

  
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10 Feb 2023

  
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Packaging Quality Control Inspector  
15 Feb 2023