

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: 10088656
Expiration Date: 11/2022
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	10088655	Pass
B9001SVIAL	Purified BSA	10059427	Pass
B7001SVIAL	NEBuffer™ 1	10064408	Pass

Assay Name/Specification	Lot # 10088656
Endonuclease Activity (Nicking) 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
Non-Specific DNase Activity (16 Hour) 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
Protein Purity Assay (SDS-PAGE) 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 for additional information.

Lauren Higgins

Lauren Higgins
Production Scientist
10 Nov 2020

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
10 Nov 2020