

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.
Lot Number: 10043399
Expiration Date: 04/2021
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

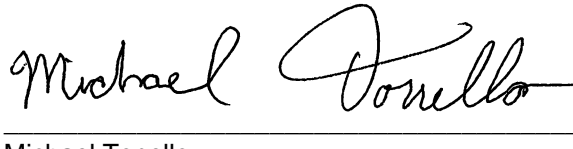
hSMUG1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0336SVIAL	hSMUG1	10043400	Pass
B9001SVIAL	Purified BSA	10014762	Pass
B7001SVIAL	NEBuffer™ 1	0101804	Pass

Assay Name/Specification	Lot # 10043399
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.



Tony Spear-Alfonso
Production Scientist
12 Sep 2018



Michael Tonello
Packaging Quality Control Inspector
07 Jun 2019