## New England Biolabs Certificate of Analysis

| Product Name: | Uracil Glycosylase Inhibitor (UGI) |
| :---: | :---: |
| Catalog Number: | M0281S |
| Concentration: | 2,000 U/ml |
| Unit Definition: | One unit of UGI is defined as the amount of protein required to inhibit one unit of E. coli UDG in 1 hour at $37^{\circ} \mathrm{C}$ in a total reaction volume of $50 \mu \mathrm{l}$. |
| Packaging Lot Number: | 10170238 |
| Expiration Date: | 09/2024 |
| Storage Temperature: | $-20^{\circ} \mathrm{C}$ |
| Storage Conditions: | 10 mM Tris- $\mathrm{HCl}, 50 \mathrm{mM} \mathrm{KCl}, 1 \mathrm{mM}$ DTT , 0.1 mM EDTA , $200 \mu \mathrm{~g} / \mathrm{ml}$ BSA , 50\% Glycerol, (pH $7.4 @ 25^{\circ} \mathrm{C}$ ) |
| Specification Version: | PS-M0281S/L v1.0 |

Uracil Glycosylase Inhibitor (UGI) Component List

| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| :--- | :--- | :--- | :---: |
| M0281SVIAL | Uracil Glycosylase Inhibitor (UGI) | 10164156 | Pass |
| B0280SVIAL | UDG Reaction Buffer | 10164157 | Pass |


| Assay Name/Specification | Lot \# 10170238 |
| :---: | :---: |
| Non-Specific DNase Activity ( $\mathbf{1 6}$ Hour) <br> A $50 \mu \mathrm{l}$ reaction in NEBuffer 1 containing $1 \mu \mathrm{~g}$ of Lambda DNA and a minimum of 30 units of Uracil Glycosylase Inhibitor (UGI) incubated for 16 hours at $37^{\circ} \mathrm{C}$ results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| Exonuclease Activity (Radioactivity Release) <br> A $50 \mu$ reaction in NEBuffer 1 containing $1 \mu \mathrm{~g}$ of a mixture of single and double-stranded [ $\left.{ }^{3} \mathrm{H}\right] \mathrm{E}$. coli DNA and a minimum of 50 units of Uracil Glycosylase Inhibitor (UGI) incubated for 4 hours at $37^{\circ} \mathrm{C}$ releases $<0.1 \%$ of the total radioactivity. | Pass |
| Endonuclease Activity (Nicking) <br> A $50 \mu \mathrm{l}$ reaction in NEBuffer 1 containing $1 \mu \mathrm{~g}$ of supercoiled PhiX174 DNA and a minimum of 50 units of Uracil Glycosylase Inhibitor (UGI) incubated for 4 hours at $37^{\circ} \mathrm{C}$ results in $<10 \%$ conversion to the nicked form as determined by agarose gel electrophoresis. | Pass |

This product has been tested and shown to be in compliance with all specifications.
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## Lauren

Lauren Sears Higgins
Production Scientist
27 Oct 2022


Michael Tonello
Packaging Quality Control Inspector
01 Nov 2022

