

## New England Biolabs Product Specification

<b>Product Name:</b>	<i>Uracil Glycosylase Inhibitor (UGI)</i>
<b>Catalog #:</b>	M0281S/L
<b>Concentration:</b>	2,000 units/ml
<b>Unit Definition:</b>	One unit of UGI is defined as the amount of protein required to inhibit one unit of <i>E. coli</i> UDG in 1 hour at 37°C in a total reaction volume of 50 µl.
<b>Shelf Life:</b>	24 months
<b>Storage Temp:</b>	-20°C
<b>Storage Conditions:</b>	10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 200 µg/ml BSA, 50% Glycerol, (pH 7.4 @ 25°C)
<b>Specification Version:</b>	PS-M0281S/L v1.0
<b>Effective Date:</b>	09 Nov 2017

### Assay Name/Specification (minimum release criteria)

**Endonuclease Activity (Nicking)** - A 50 µl reaction in NEBuffer 1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of Uracil Glycosylase Inhibitor (UGI) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

**Exonuclease Activity (Radioactivity Release)** - A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] *E. coli* DNA and a minimum of 50 units of Uracil Glycosylase Inhibitor (UGI) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

**Non-Specific DNase Activity (16 Hour)** - A 50 µl reaction in NEBuffer 1 containing 1 µg of Lambda DNA and a minimum of 30 units of Uracil Glycosylase Inhibitor (UGI) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Date 09 Nov 2017

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