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## New England Biolabs Certificate of Analysis

Product Name:	Uracil Glycosylase Inhibitor (UGI)
Catalog #:	M0281S/L
Concentration:	2,000 units/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°C in a total reaction volume of 50 $\mu$ l.
<i>Lot</i> #:	0031709
Assay Date:	09/2017
Expiration Date:	9/2019
Storage Temp:	-20°C
Storage Conditions:	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)
Specification Version:	PS-M0281S/L v1.0
Effective Date:	05 Feb 2018

Assay Name/Specification (minimum release criteria)	Lot #0031709
<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 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.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 $\mu$ l reaction in NEBuffer 1 containing 1 $\mu$ g of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> 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.	
<b>Non-Specific DNase Activity (16 Hour)</b> - A 50 $\mu$ l reaction in NEBuffer 1 containing 1 $\mu$ g 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.	Pass

\* 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.

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Authorized by Derek Robinson 05 Feb 2018



Lauren bliggins Inspected by

Inspected by Lauren Higgins 26 Sep 2017