240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Product Specification

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 µl.

Shelf Life: 24 months
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: 09 Nov 2017

Assay Name/Specification (minimum release criteria)

Endonuclease Activity (Nicking) - A 50 μ l reaction in NEBuffer 1 containing 1 μ g 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 μ l reaction in NEBuffer 1 containing 1 μ g of a mixture of single and double-stranded [3 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 μ l reaction in NEBuffer 1 containing 1 μ 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.

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.

Derek Robinson Quality Approver





