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## New England Biolabs Product Specification

Product Name:	BaeGI
Catalog #:	R0708S/L/V
Concentration:	10,000 units/ml
Unit Definition:	One unit is defined as the amount of enzyme required to digest 1 $\mu$ g of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 $\mu$ l.
Shelf Life:	24 months
Storage Temp:	-20°C
Storage Conditions:	50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 μg/ml BSA
Specification Version:	PS-R0708S/L v1.0
Effective Date:	07/25/2013

Assay Name/Specification (minimum release criteria)

**Exonuclease Activity (Radioactivity Release)** - A 50  $\mu$ l reaction in NEBuffer 3.1 containing 1  $\mu$ g of a mixture of single and doublestranded [<sup>3</sup>H] *E. coli* DNA and a minimum of 50 units of BaeGI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

**Ligation and Recutting (Terminal Integrity)** - After a 10-fold over-digestion of Lambda DNA with BaeGI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with BaeGI.

Non-Specific DNase Activity (16 Hour) - A 50  $\mu$ l reaction in NEBuffer 3.1 containing 1  $\mu$ g of Lambda DNA and a minimum of 30 Units of BaeGI 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 <u>www.neb.com/trademarks</u> for additional information.

Date 07/25/2013

Derek Robinson Quality Approver



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