Certificate of Analysis

pGL4.73[*hRluc*/SV40] Vector:

Part No.	Size
E691A	20µg

Instructions for use of this product can be found in the pGL4 Luciferase Reporter Vectors Technical Manual #TM259, available online at: **www.promega.com/resources/protocols/**

Description: The pGL4.73[*hRluc*/SV40] Vector[a–c] encodes the luciferase reporter gene *hRluc* (*Renilla reniformis*) and is designed for high expression and reduced anomalous transcription. The pGL4 Vectors are engineered with fewer consensus regulatory sequences and a synthetic gene, which has been codon optimized for mammalian expression.

The pGL4.73[*hRluc*/SV40] Vector contains the *hRluc* reporter gene and an SV40 early enhancer/promoter and can be used as an expression control or a co-reporter vector.

Concentration: 1µg/µl.

Storage Buffer: The pGL4.73[*hRluc*/SV40] Vector is supplied in 10mM Tris-HCl (pH 7.4), 1mM EDTA.

Storage Conditions: See the product information label for storage temperature recommendations. Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes. These fluctuations can greatly alter product stability. See the expiration date on the product information label.

Usage Note: Concentration gradients may form in frozen products and should be dispersed upon thawing. Mix well prior to use.

Quality Control Assays

Nuclease Assay: Following incubation of 1µg of pGL4.73[*hRluc*/SV40] Vector in standard restriction digest buffers at 37°C for 16–24 hours, no evidence of nuclease activity was detected by agarose gel electrophoresis.

Physical Purity: $A_{260}/A_{280} \geq 1.80$, $A_{260}/A_{250} \geq 1.05$ at pH 7.4.

Sequence: The pGL4.73[*hRluc*/SV40] Vector has been completely sequenced and is 100% identical to the published sequence, available at: **www.promega.com/products/vectors/**

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[b]Patent Pending.

[c]U.S. Pat. No. 7,906,282 and European Pat. No. 1341808.

Signed by:

R. Wheeler, Quality Assurance

Part# 9PIE691
Revised 10/16

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Part# 9PIE691
Printed in USA. Revised 10/16.

pGL4.73 [*hRluc*/SV40] Vector Features and Circle Map

The following features are present in the vector based on nucleotide sequence.

SV40 early enhancer/promoter	51–469
hRluc reporter gene	499–1434
SV40 late poly(A) signal	1466–1687
Reporter Vector primer 4 binding region	1755–1774
Co/EI-derived plasmid replication origin	2012
Synthetic β-lactamase (Amp^r) coding region	2803–3663
Synthetic poly(A) signal/transcriptional pause site	3768–3921
Reporter Vector primer 3 binding region	3870–3889

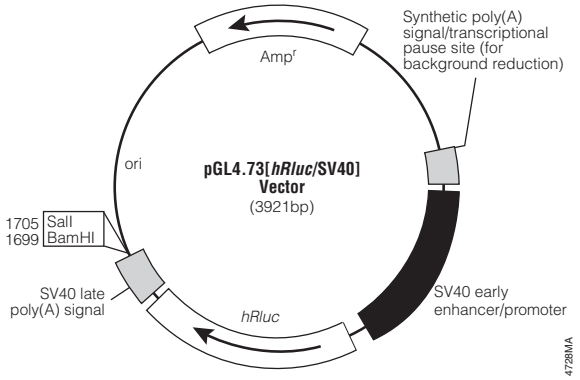

Figure 1. pGL4.73 [*hRluc*/SV40] Vector circle map and sequence reference points.

Note: Maps of all the pGL4 Vectors are available at: **www.promega.com/products/vectors/**

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