

## Certificate of Analysis

### pGL4.73[hRLuc/SV40] Vector:

Part No.                      Size  
E691A                         20µg

Part# 9PIE691  
Revised 10/13



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/](http://www.promega.com/resources/protocols/)

**Description:** The pGL4.73[hRLuc/SV40] Vector<sup>(a-c)</sup> 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.



## Promega

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## 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/](http://www.promega.com/products/vectors/)

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Signed by:

J. Stevens, Quality Assurance

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<sup>(b)</sup>Patent Pending.

<sup>(c)</sup>U.S. Pat. No. 7,906,282 and European Pat. No. 1341808.

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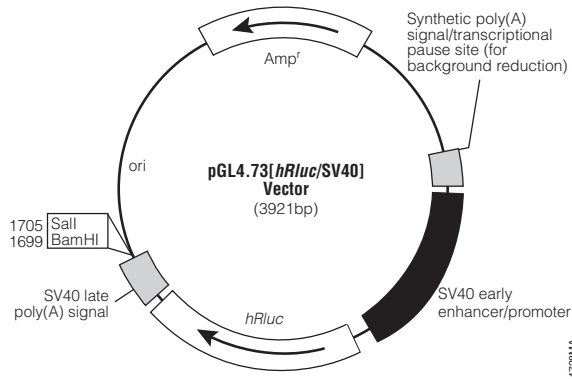
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### pGL4.73 [*hRLuc*/SV40] Vector Features and Circle Map

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

SV40 early enhancer/promoter	51–469
<i>hRLuc</i> reporter gene	499–1434
SV40 late poly(A) signal	1466–1687
Reporter Vector primer 4 binding region	1755–1774
<i>ColEI</i> -derived plasmid replication origin	2012
Synthetic $\beta$ -lactamase ( <i>Amp<sup>r</sup></i> ) 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/](http://www.promega.com/products/vectors/)