Certificate of Analysis

pGL4.79[*hRluc*/Neo] Vector:

Part No.	Size
E697A	20µg

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

Part# 9PIE697
Revised 8/13

AF9PI E697 0813E697

Description: The pGL4.79[*hRluc*/Neo] Vector[a–d] encodes the luciferase reporter gene *hRluc* (*Renilla reniformis*) and is designed for high expression and reduced anomalous transcription. This vector also contains a mammalian selectable marker for neomycin resistance in which the number of transcription factor binding sites has been reduced and mammalian codon usage optimized. The pGL4 Vectors are engineered with fewer consensus regulatory sequences than the pGL3 Vectors and a synthetic reporter gene that has been codon optimized for mammalian expression.

The pGL4.79[*hRluc*/Neo] Vector is a basic vector with no promoter. However, it contains a multiple cloning region that allows cloning of a promoter of choice.

Concentration: 1µg/µl.

GenBank® Accession Number: DQ188843.

Storage Buffer: The pGL4.79[*hRluc*/Neo] 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 Notes:

1. For easy transfer from one pGL4 Vector to another, the multiple cloning region is consistent throughout the pGL4 Vector series. For easy transfer between pGL3 Vectors and pGL4 Vectors, many of the restriction enzyme sites present in the pGL3 Vectors are also present in the pGL4 Vectors.
2. 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 pGL4.79[*hRluc*/Neo] Vector in standard restriction digest buffers at 37°C for 16–24 hours, no evidence of nuclease activity is detected by agarose gel electrophoresis.

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

Sequence: The pGL4.79[*hRluc*/Neo] Vector has been completely sequenced and has 100% identity with the published sequence, available at: **www.promega.com/vectors**

Signed by: J. Stevens

J. Stevens, Quality Assurance

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711-5399 USA
Telephone 608-274-4330
Toll Free 800-356-9526
Fax 608-277-2516
Internet www.promega.com

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[b]Patent pending.

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

[d]U.S. Pat. No. 7,728,118.

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pGL4.79[*hRluc*/Neo] Vector Features List and Maps

hRluc reporter gene	100–1035
SV40 late poly(A) signal	1067–1288
SV40 early enhancer/promoter	1336–1754
Synthetic neomycin phosphotransferase (Neo^r) coding region	1779–2573
Synthetic poly(A) signal	2598–2646
Reporter Vector primer 4 (RVprimer4) binding region	2713–2732
*Col*E1-derived plasmid replication origin	2970
Synthetic β-lactamase (Amp^r) coding region	3761–4621
Synthetic poly(A) signal/transcriptional pause site	4726–4879
Reporter Vector primer 3 (RVprimer3) binding region	4828–4847

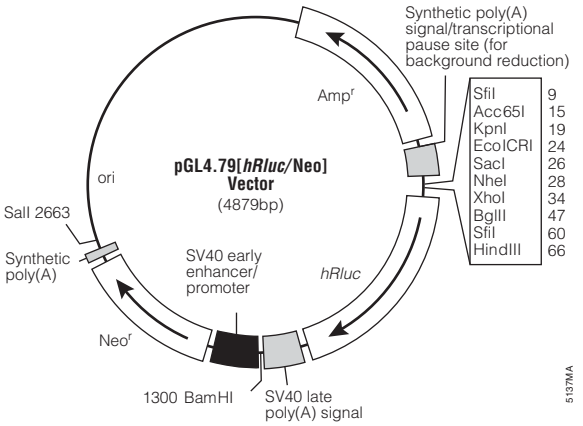

Figure 1. pGL4.79[*hRluc*/Neo] Vector map.

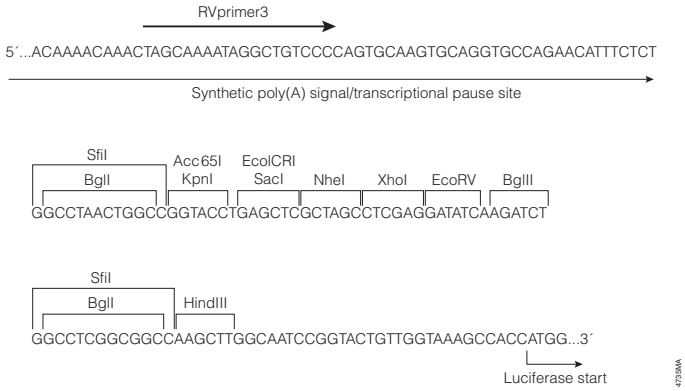

Figure 2. Multiple cloning region of the pGL4.79[*hRluc*/Neo] Vector.

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