Certificate of Analysis

pGL4.10[*luc2*] Vector:

Part No.	Size
E665A	20µg

Part# 9PIE665
Revised 10/16

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

Description: The pGL4.10[*luc2*] Vector[a,b,c] encodes the luciferase reporter gene *luc2* (*Photinus pyralis*) 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 pGL4.10[*luc2*] Vector is a basic vector with no promoter. However, it contains a multiple cloning region to allow cloning of a promoter of choice.

Concentration: 1µg/µl.

GenBank® Accession Number: AY738222.

Storage Buffer: The pGL4.10[*luc2*] 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.

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Quality Control Assays

Nuclease Assay: Following incubation of 1µg of pGL4.10[*luc2*] 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: $A_{260}/A_{280} \geq 1.80$, $A_{260}/A_{250} \geq 1.05$ at pH 7.4.

Sequence: The pGL4.10[*luc2*] Vector has been completely sequenced and has 100% identity with the published sequence, available at: **www.promega.com/vectors/**

Signed by:

R. Wheeler, Quality Assurance

Promega Corporation

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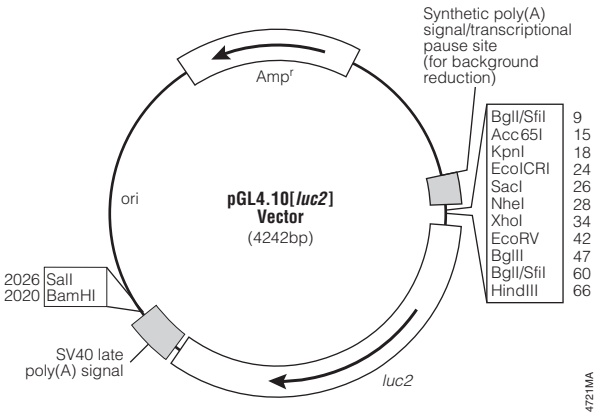
pGL4.10[*luc2*] Vector Features List and Map

Multiple cloning region	1–70
luc2 reporter gene	100–1752
SV40 late poly(A) region	1787–2008
Reporter Vector primer 4 (RVprimer4) binding region	2076–2095
*Col*E1-derived plasmid replication origin	2333
Synthetic β-lactamase (Amp^r) coding region	3124–3984
Synthetic poly(A) signal/transcriptional pause site	4089–4242
Reporter Vector primer 3 (RVprimer3) binding region	4191–4210



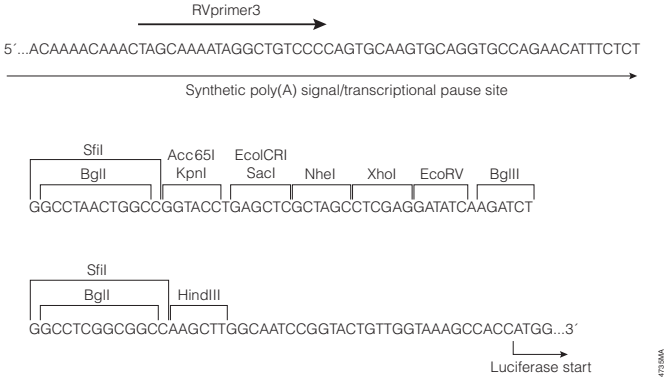


Figure 2. The multiple cloning region of the pGL4 Vectors.

Sequence information and restriction enzyme tables for the pGL4 Vectors are available online at: **www.promega.com/vectors**

Further information on the use of pGL4 Vectors is available in Technical Manual #TM259, which is available online at: **www.promega.com/protocols**

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