Certificate of Analysis

pGL4.13[*luc2*/SV40] Vector:

Part No.	Size
E668A	20µg

Part# 9PIE668
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**

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Description: The pGL4.13[*luc2*/SV40] 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 pGL4.13[*luc2*/SV40] Vector contains the *luc2* reporter gene and the SV40 early enhancer/promoter for use as an expression control or a co-reporter vector.

Concentration: 1µg/µl.

GenBank® Accession Number: AY738225.

Storage Buffer: The pGL4.13[*luc2*/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

Contaminant Assays

Contaminating Nucleic Acids: RNA, single-stranded DNA and chromosomal DNA are not evident in specified quantities of the vector as determined by agarose gel electrophoresis.

Nuclease Assay: Following incubation of 1µg of the vector in Restriction Enzyme Buffer at 37°C for 16–24 hours, no evidence of nuclease activity is detected by agarose gel electrophoresis.

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

Functional Assays

Identity Assay: The vector has been sequenced completely and has 100% identity with the published sequence available at: www.promega.com/vectors/

Restriction Digestion: The functional purity of the vector DNA is verified by successful digestion with restriction enzymes at the optimal temperature for one hour. Samples are examined by agarose gel electrophoresis, comparing cut and uncut vector DNA with marker DNA.

Signed by:

R. Wheeler, Quality Assurance

Promega

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pGL4.13[*luc2*/SV40] Vector Features List and Map

SV40 early enhancer/promoter	51–469
luc2 reporter gene	499–2151
SV40 late poly(A) region	2186–2407
Reporter Vector primer 4 (RVprimer4) binding region	2475–2494
*Col*E1-derived plasmid replication origin	2732
Synthetic β-lactamase (Amp^r) coding region	3523–4383
Synthetic poly(A) signal/transcriptional pause region	4488–4641
Reporter Vector primer 3 (RVprimer3) binding region	4590–4609

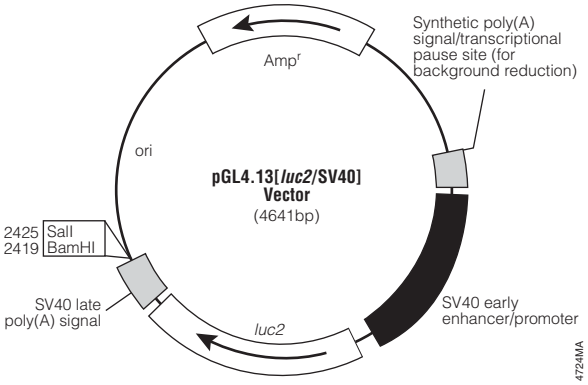

Figure 1. pGL4.13[*luc2*/SV40] Vector circle map.

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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