### 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.

### Part# 9PIE668

<table>
<thead>
<tr>
<th>Description</th>
<th>Concentration</th>
<th>GenBank Accession Number</th>
<th>Storage Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>pGL4.13[ luc2/SV40] Vector</td>
<td>1µg/µl</td>
<td>AY738225</td>
<td>10mM Tris-HCl (pH 7.4), 1mM EDTA</td>
</tr>
</tbody>
</table>

### Instructions for use

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

**Signed by:** R. Wheeler, Quality Assurance

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Revised 10/16
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
- ColE1-derived plasmid replication origin: 2732
- Synthetic β-lactamase (Ampr) coding region: 3523–4383
- Synthetic poly(A) signal/transcriptional pause region: 4488–4641
- Reporter Vector primer 3 (RVprimer3) binding region: 4530–4609

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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U.S. Pat. No. 8,008,006 and European Pat. No. 1341808.

Patents Pending.