### **Certificate of Analysis**

## pGL4.70[hRluc] Vector:

Part No. E688A 20µg



**Instructions for use** of this product can be found in the pGL4 Luciferase Reporter Vectors Technical Manual #TM259, available online at:

www.promega.com/protocols

Description: The pGL4.70[hRluc] Vector(a-c) encodes the hRluc gene (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 pGL4.70[hRluc] Vector is a basic vector with no promoter. However, it contains a multiple cloning region that allows for cloning of a promoter of choice.

Concentration: 1µg/µl

**Storage Buffer:** The pGL4.70[hRluc] Vector is supplied in 10mM Tris-HCI (pH 7.4), 1mM EDTA.

Storage Conditions: See the product information label for storage temperature recommendations. Avoid multiple freezethaw 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 pGL4.70[hRluc] 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:**  $A_{260}/A_{280} \ge 1.80$ ,  $A_{260}/A_{250} \ge 1.05$  at pH 7.4.

Sequence: The pGL4.70[hRluc] Vector has been completely sequenced and is 100% identical to the published sequence, available at: www.promega.com/vectors/

# Part# 9PIE688 Revised 5/13





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

#### PRODUCT USE LIMITATIONS, WARRANTY, DISCLAIMER

Promega manufactures products for a number of intended uses. Please refer to the product label for The intended uses rease the intended the intended use statements for specific products. Promega products contain chemicals which may be harmful if misused. Due care should be exercised with all Promega products to prevent direct human

Each Promega product is shipped with documentation stating specifications and other technical information. Promega products are warranted to meet or exceed the stated specifications. Promega's sole obligation and the customer's sole remedy is limited to replacement of products free of charge in the event products fail to perform as warranted. Promega makes no other warranty of any kind whatsoever, and SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES OF ANY KIND OR NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO THE SUITABILITY, PRODUCTIVITY, DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, CONDITION, OR ANY OTHER MATTER WITH RESPECT TO PROMEGA PRODUCTS. In no event shall Promega be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or the failure of Promega products to perform in accordance with the stated specifications.

Signed by:

(a) READ THIS FIRST BEFORE OPENING PRODUCT

The sale of this product and its use are subject to the terms of a limited use label license, the full text of which is available at: www.promega.com/LULL. That text must be read by the purchaser prior to opening this product to determine whether the purchaser agrees that all use of the product shall be in accordance with the license terms. If the purchaser is not willing to accept the terms of the limited use label license, Promega is willing to accept the return of the unused product and provide the purchaser with a full refund. However, if the product is opened for any reason, then the purchaser agrees to be bound by the terms of the limited use label license.

(b)Patent Pending

©U.S. Pat. No. 7,906,282 and European Pat. No. 1341808.

© 2004–2013 Promega Corporation. All Rights

All specifications are subject to change without prior

Product claims are subject to change. Please contact Promega Technical Services or access the Promega online catalog for the most up-to-date information on Promega products.

Part# 9PIE688 Printed in USA. Revised 5/13



### pGL4.70 [hRluc] Vector Features and Circle Map

The following features are present in the vector based on nucleotide sequence. Multiple cloning region 1-70 hRluc reporter gene 100-1035 SV40 late poly(A) signal 1067-1288 Reporter Vector primer 4 binding region 1356-1375 Co/El-derived plasmid replication origin 1613 Synthetic  $\beta$ -lactamase (Amp<sup>r</sup>) coding region 2404-3264 Synthetic poly(A) signal/transcriptional pause site 3369-3522 Reporter Vector primer 3 binding region 3471-3490

Note: Maps of all the pGL4 Vectors are available at: www.promega.com/vectors/

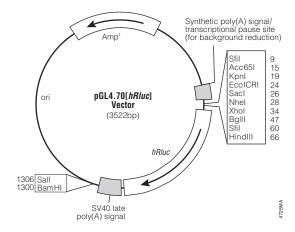


Figure 1. pGL4.70 [hRluc] Vector circle map and sequence reference points.

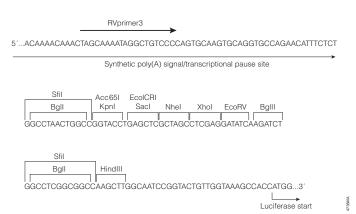


Figure 2. pGL4.70 [hRluc] Vector multiple cloning region.