Certificate of Analysis

pGL4.24[*luc2P*/minP] Vector:

Part No. E842A

Size 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 pGL4.24[*luc2P*/minP] Vector^(a-d) encodes the luciferase reporter gene *luc2P* (*Photinus pyralis*) and is designed for high expression and reduced anomalous transcription. The vector contains a multiple cloning region for insertion of a response element of interest upstream of a minimal promoter and the *luc2P* gene. *luc2P* is a synthetically derived luciferase sequence with humanized codon optimization. The *luc2P* gene also contains hPEST, a protein destabilization sequence. The protein encoded by *luc2P* responds more quickly than the protein encoded by the *luc2* gene upon induction. The vector backbone contains an ampicillin resistance gene to allow selection in E. coli.

Concentration: 1µg/µl.

GenBank® Accession Number: DQ904456.

Storage Buffer: The pGL4.24[luc2P/minP] 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 Note: 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 the vector in restriction digest buffer B at 37°C for 16 hours, no evidence of nuclease activity is 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 pGL4.24[/uc2P/minP] Vector has been completely sequenced and has 100% identity with the published sequence, available at: www.promega.com/vectors

(a) BY USE OF THIS PRODUCT. RESEARCHER AGREES TO BE BOUND BY THE TERMS OF THIS LIMITED USE LABEL LICENSE If the researcher is not willing to accept the terms of this label license, and the product is unused, Promega will accept return of

If the researcher is not willing to accept the terms of this label license, and the product is unused, Promega will accept return of the unused product and provide the researcher with a full refund. Researchers may use this product for research use only, no commercial use is allowed. "Commercial use" means any and all uses of this product and derivatives by a party for money or other consideration and may include but is not limited to use in: (1) product manufacture, and (2) to provide a service, information or data; and/or resale of the product to modify or otherwise, whether or not such product or derivatives are resold for use in research. Researchers shall have no right to modify or otherwise, erceate variations of the nucleotide sequence of the resulting luciferase gene except that researchers may: (1) create fused gene sequences provided that the coding sequence of the resulting luciferase gene has no more than four deoxynucleotides missing at the affected termi-product or derivatives is authorized without the prior express written consent of Promega. In addition, researchers may tells is authorized without the prior express written consent of promega. In addition, researchers may tells or derivatives; or (2) contact Promega to obtain a license for use of the product and its derivatives; researchers may tensfer derivatives; or (2) contact Promega to obtain a license for use of the respect on any uses outside this label license, including any diagnostic, therapeutic or prophylacit uses, please contact Promega for supply and licensing information. PROMEGA MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EITHER EXPRESED OR IMPLED, INCLUDING FOR MER-CHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH REGARDS TO THE PRODUCT. The terms of this label license shall be governed under the laws of the State of Wisconsin, USA. This label license relates to Promega patents and/or patent shall be governed under the laws of the State of Wisconsin, USA. This label license relates to Promega patents and/or patent applications on improvements to the luciferase gene.

(b)U.S. Pat. No. 5.670.356

(c)Patent Pending

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

Ren Wheeler

R. Wheeler, Quality Assurance

Part# 9PIE842 Revised 10/16



Promega Corporation

2800 Woods Hollow Road	ł
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 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 contact.

Each Promega product is shipped with documentation stating specifications and other technical information. Promega products are warranted to meet or exceed 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 replace-ment 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 WAR-RANTIES 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, MER-CHANTABILITY, CONDITION, OR ANY OTHER MAT-TER WITH RESPECT TO PROMEGA PRODUCTS. In no event shall Promega be liable for claims for any other damages, whether direct, incidental, foresee-able, consequential, or special (including but not lim-ited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including ne gligence) or strict liability arising in connection with the sale or the failure of Promega products to perform in accordance with the stated specifications.

© 2006-2013, 2015, 2016 Promega Corporation. All Rights Reserved.

GenBank is a registered trademark of the U.S. Department of Health and Human Services.

Products may be covered by pending or issued patents or may have certain limitations. Please visit our Web site for more information.

All specifications are subject to change without prior notice.

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

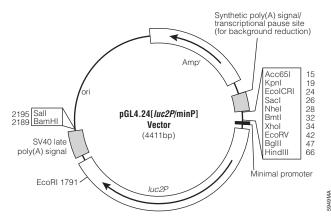
Part# 9PIE842 Printed in USA. Revised 10/16.

Signed by:



pGL4.24[*luc2P*/minP] Vector Features List and Maps:

-	•
Multiple cloning region	1–70
Minimal promoter	78–108
<i>luc2P</i> reporter gene	141–1916
SV40 late poly(A) region	1956-2177
Reporter Vector primer 4 (RVprimer4) binding region	2245-2264
ColE1-derived plasmid replication origin	2502
Synthetic β-lactamase (Amp ^r) coding region	3293-4153
Synthetic poly(A) signal/transcriptional pause region	4258-4411
Reporter Vector primer 3 (RVprimer3) binding region	4360-4379



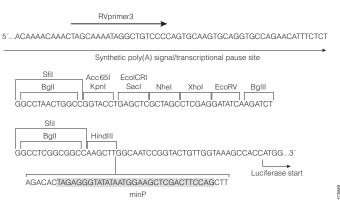


Figure 2. Multiple cloning region of the pGL4.24[*luc2P*/minP] Vector.

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

For more information see the *pGL4 Luciferase Reporter Vectors Technical Manual* #TM259, online at: www.promega.com/protocols

Summary of Changes, 8/15 Revision

The following changes were made to the 8/15 version of this document: Legal disclaimers were updated to remove expired information.

Figure 1. pGL4.24[*luc2P*/minP] Vector map.