Certificate of Analysis

pGL4.31[*luc2P*/*GAL4*UAS/Hygro] Vector:

Part# 9PIC935

Revised 10/16

Part No.	Size (units)
C935A	20µg

Instructions for use of this product can be found in the CheckMate™/Flexi® Vector Mammalian Two-Hybrid System Technical Manual #TM283, available online at: **www.promega.com/protocols**

AF9PIC935 1016C935

Description: The pGL4.31[*luc2P*/*Gal4*UAS/Hygro] Vector[a,b,c] is designed to report transcriptional activation using the firefly luciferase reporter gene. This reporter vector contains five consensus binding sequences, or Upstream Activating Sequences, for the Gal4 DNA-binding domain (*Gal4*UAS) and a minimal adenoviral promoter upstream of the firefly luciferase gene. The vector backbone is based on the pGL4 luciferase reporter vector series, which has been engineered to reduce the occurrence of anomalous transcription. The *luc2P* reporter gene is a synthetic firefly luciferase sequence, which has been codon-optimized for high mammalian expression and contains minimal cryptic DNA regulatory elements. In addition, the *luc2P* gene incorporates a protein degradation sequence, PEST, resulting in a destabilized reporter protein with a faster response to transcriptional regulation. The vector also contains an ampicillin selection marker (Amp) for *E. coli* and a hygromycin selection marker (Hygro) for mammalian cells. The pGL4.31[*luc2P*/*Gal4*UAS/Hygro] Vector is provided for use with the CheckMate™/Flexi® Vector Mammalian Two-Hybrid System (Cat.# C9360).

Concentration: 1µg/µl.

GenBank® Accession Number: DQ487213.

Storage Buffer: The pGL4.31[*luc2P*/*Gal4*UAS/Hygro] Vector is supplied in 10mM Tris-HCl (pH 7.4), 1mM EDTA.

Storage Conditions: See the Product Information Label for storage recommendations. Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes.

Usage Notes: Concentration gradients may form in frozen products and should be dispersed upon thawing. Mix well prior to use.

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

Quality Control Assays

Nuclease Assay: Following incubation of 1µg of the pGL4.31[*luc2P*/*Gal4*UAS/Hygro] Vector in Restriction Enzyme Buffer B at 37°C for 16 hours, no evidence of nuclease activity is detected by agarose gel electrophoresis.

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

[a]BY USE OF THIS PRODUCT, RESEARCHER AGREES TO BE BOUND BY THE TERMS OF THIS LIMITED USE LABEL LICENSE.

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

[c]U.S. Pat. No. 7,728,118.

Signed by:

R. Wheeler, Quality Assurance

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All specifications are subject to change without prior notice.

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Usage Information

pGL4.31[*luc2P*/GAL4UAS/Hygro] Vector circle map and sequence reference points

The following features are present in the vector based on nucleotide sequence.

pGL4.31[l*uc2P*/GAL4UAS/Hygro] Vector Sequence Reference Points:

GAL4UAS binding sites	31–133
Adenovirus major late promoter	145–185
luc2P firefly luciferase reporter	238–2013
SV40 late polyadenylation signal	2053–2274
SV40 enhancer/early promoter	2322–2740
Synthetic hygromycin resistance (Hygro^r) coding region	2765–3802
Synthetic polyadenylation signal	3826–3874
ColE1-derived plasmid origin of replication	4198–4234
Synthetic β-lactamase (Amp^r) coding region	4989–5849
Synthetic poly(A) signal/transcriptional pause site	5954–6107

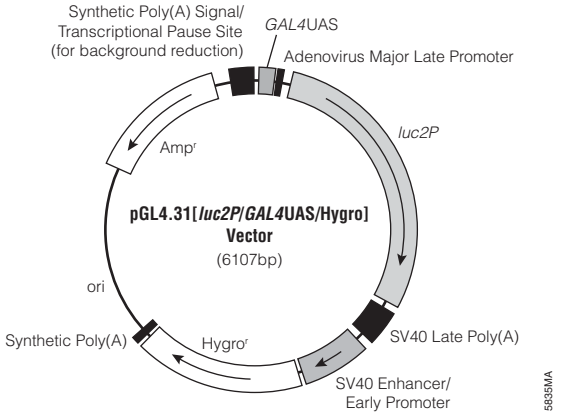

Figure 1. pGL4.31[*luc2P*/GAL4UAS/Hygro] Vector circle map.

Maps of all Promega Vectors are available at:
www.promega.com/vectors

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