

PROMEGA NOW

News from Promega and the world of Life Sciences

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LIFE SCIENCE RESEARCH EDITION

Issue 25

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Promega



welcome

Welcome to this new and updated newsletter for customers of Promega in the UK. We have a new look for the New Year with more space so we can bring you the latest information, not only on our products but also from the world of life science and research in the UK.

2006 seems to have been the year of big projects and big moves in both the research community and the life science industry. The Biotechnology and Biological Sciences Research Council (BBSRC) & Engineering and Physical Sciences Research Council (EPSRC) joined together to finance six Systems Biology centres around the country with an investment of £43 million and a further £35 million from the BBSRC to support Systems Biology research in universities. The UK BioBank, hosted by Manchester University, started recruiting the first of a planned 500,000 participants to what will be the biggest medical experiment in the world, costing £61 million and providing an unprecedented epidemiological background for genetic studies.

Meanwhile, life science supply companies have been through a staggering series of mergers, acquisitions and takeovers, creating some large conglomerates. Whether the benefits will be



felt most by the researcher or the shareholders have yet to be seen but the likelihood is that there is more to come in 2007.

Future editions of this newsletter will also include details of where you can meet us at events, news about our Young Life Scientist awards for researchers who are working towards or have just completed their PhD and a competition with some great prizes.

We hope you enjoy your read and wish you every success in the New Year.

Derek McCall
Managing Director, Promega UK

Luciferase reporter technology – see the light!

Promega's pGL4 luciferase vector series has just been expanded to make life even easier. Vectors are now available with minimal promoters, enabling easy study of response elements. In addition, minimal promoter vectors are available with a choice of a cAMP, NFAT or GAL4UAS response elements already present. (Figure 1).

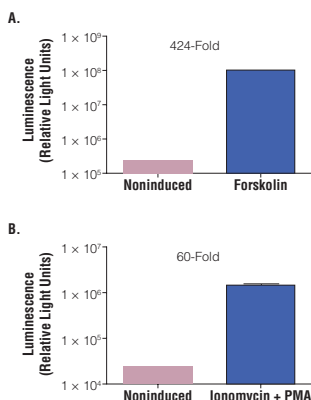


Figure 1. CRE and NFAT Induction. High levels of reporter induction for (A) pGL4.29[luc2P/CRE/Hygro] and (B) pGL4.30[luc2P/NFAT-RE/Hygro] in transient transfection of HEK 293 cells.

pGL4 vectors offer improved sensitivity and biological relevance due to:

- ¥ Increased reporter gene expression
- ¥ Reduced background and risk of expression artifacts
- ¥ Improved temporal response owing to destabilised luciferase genes

Couple any pGL4 vector with Promega's luciferase assay reagents, such as Dual-Luciferase[®] Assay Reagent, Dual-Glo[™], Bright-Glo[™], Steady-Glo[®] or EnduRen[™] to create an ultra-sensitive cell-based assay that enables you to accurately probe the regulation and activity of a protein or a pathway within the cell.

“ My Scientist has been generating some excellent data with your pGL4 construct. I must say I was a little sceptical but I am impressed. The assay time has decreased by half so we are very pleased. The Steady Glo reagent was also superior to our existing reagent. ”

Group Leader,
Assay Validation, UK Pharmaceutical Company

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For more information go to www.promega.com/uk/pgl4 or order pGL4 and luciferase assay brochures on the fackback form.



RNA isolation for every situation

As RNA isolation becomes ever more important for understanding functional aspects of gene expression, analytical techniques such as real-time PCR and micro-arrays demand more from the purification technology you choose. Selecting the right RNA purification system is not just about the ultimate success or failure of your experiment, its also about how long it takes to get a result, how much hands on time you have to spend on each purification and what it costs to get you there. Promega's range of RNA purification systems is designed to help you to achieve the results you need.

High Purity Single mini-prep spin columns

Quick and Easy with no detectable gDNA, the SV Total RNA System offers speed and convenience and can be used in a spin-prep or vacuum based protocol. Total RNA from a variety of sample types can be isolated within 60-70 minutes without the need for phenol:chloroform extraction or ethanol precipitation. Residual genomic DNA carry over is eliminated by on-column DNase digestion.

| Product | Cat. No. | Size | Price |
|---------------------|----------|-----------|-------|
| SV Total RNA | Z3101 | 10 preps | £46 |
| Purification System | Z3100 | 50 preps | £159 |
| | Z3105 | 250 preps | £631 |

Fast, high yield midi-preps

Process up to 300mg of plant or animal tissue, 20 ml of blood, 5×10^7 tissue culture cells or 1×10^{10} bacterial cells in less than 2 hours. A novel clearing agent removes genomic DNA to undetectable levels so DNase treatment is unnecessary. The rapid protocol leads to yields of up to 1mg of DNA free total RNA.

| Product | Cat. No. | Size | Price |
|-----------------|----------|----------|-------|
| PureYield™ RNA | Z3740 | 10 preps | £72 |
| Midiprep System | Z3741 | 50 preps | £304 |



Request our RNA Analysis notebook with vital information for purifying and analysing RNA. Fill in the faxback or visit http://www.promega.com/uk/rna_guide to request your personal copy.

Personal automation comes to RNA purification



Eliminate hands-on time and labour. The Maxwell® 16 System can purify total RNA from up to 16 samples in less than 40 minutes. All you have to do is pipette the cleared lysate into the purification cartridge and press start leaving you to get on with the real science. Purified total RNA is ready for immediate downstream applications such as qRT-PCR.



For more information visit
www.promega.com/Maxwell16

Total RNA from up to 96 samples in less than an hour

If your research requires a higher throughput, the SV 96 Total RNA Isolation System provides you with a quick and easy solution for the preparation of intact RNA from up to 96 samples in a manual or automated format. The SV96 Total RNA System can be used on liquid handlers such as the Biomek® FX and Perkin Elmer MultiPROBE® II HT/EX. A full list of suitable platforms is available at <http://www.promega.com/automethods>.

| Product | Cat. No. | Size | Price |
|---------------------|----------|------|-------|
| SV 96 Total RNA | Z3500 | 1x96 | £224 |
| Purification System | Z3505 | 5x96 | £989 |

Lamin A/C

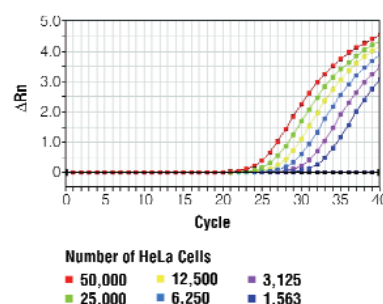


Figure 1: Qualitative real time RT-PCR analysis of total RNA isolated from HeLa cells using the SV96 Total RNA Isolation System.



Did you know?

The only letter not appearing on the Periodic Table is the letter "J".

Win a case of fine wines!

For your chance to win **one of 50 cases of fine wines*** simply enter our prize draw competition. To enter you will need to complete the seven missing letters in the table below which spell out a word, using references from the 2007 Promega catalogue.

*Case can be delivered to your home address upon request once you have been identified as a winner.



Instructions:

Use the first letter of the missing word in our clues below to spell out the word in the table on the faxback form. The missing words can be found in the features section of our catalogue pages on the page numbers referenced.

1. **Page 49** Measure the number of _____ and Dead Cells in Culture Simultaneously
2. **Page 242** Generate _____ Protein
3. **Page 303** Blue/White _____-Qualified
4. **Page 156** _____ Reporter Gene Expression
6. **Page 120** Safety and _____
8. **Page 85** _____ Labelled Fusion Proteins Using SDS-PAGE, Mass, Spectrometry, etc
9. **Page 97** Enjoy Amazing _____

Terms and conditions:

Entrants must provide the entry details as specified.

Competition open to UK and overseas residents. There will be one prize draw for a chance to win one of 50 cases of fine wines, combining entrants from all countries.

Only one entry per person is permitted.

The prize may not be transferred to any other person.

No cash alternative or alternative prize is available on request, but in the event of the advertised prize being unavailable we reserve the right to offer an alternative prize of equal or greater value.

Prize draw will take place on 28th February 2007.

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You can also enter our competition or request information by emailing: ukmarketing@promega.com or online at: www.promega.com/uk/competition

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|----|----|----|----|----|----|----|----|----|-----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| | | | | F | | R | | | E |



faxback 0800 9803966

PLEASE COMPLETE WITH YOUR BUSINESS CONTACT DETAILS

Title: _____

First Name: _____

Surname: _____

Dept: _____

Institute/Company: _____

Address: _____

Postcode: _____ Telephone: _____



please send me the following



- 2007 Promega Life Sciences Catalogue



- BR160 — pGL4 Brochure



- UKBR59 — Luciferase Assay Brochure



- BR120 — RNA Brochure

- IP100 — Protease Assay Information Pack

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Did you know?

The longest cells in the human body are the motor neurons. They can be up to 4.5 feet (1.37 meters) long and run from the lower spinal cord to the big toe.

