



win a pair of ODEON cinema tickets!

For your chance to win 1 of 40 pairs of ODEON Cinema tickets simply enter our prize draw competition.

Instructions:

To find the answer to this question please look inside the enclosed 'Promega Rewards' brochure.

Simply answer the following question:

How many points are needed to redeem the Molecular Cloning laboratory manual?

_____ points

Terms and conditions:

Entrants must provide the entry details as specified. Competition is only open to UK entrants. 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. The prize draw will randomly pick 40 winners who will each receive a pair of ODEON cinema tickets. Prize draw will take place on 31st October 2007.

To Enter:

Either complete the missing number of points online at: www.promega.com/uk/competition or Faxback to: 0800 980 3966



You can also enter our competition online at: www.promega.com/uk/competition



Cut out these two FREE points and start collecting now!

www.promega.com/uk/rewards/request



faxback 0800 980 3966

PLEASE COMPLETE WITH YOUR WORK CONTACT DETAILS

Title: _____

First Name: _____

Surname: _____

Dept: _____

Institute/Company: _____

Address: _____

Postcode: _____ Telephone: _____

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Southampton
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i please send me the following

- P450 Assays Scientific Poster
- cAMP-Glo™ Scientific Poster

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Did you know?

90 degrees below zero your breath will freeze in mid-air and fall to the ground.



PROMEGA NOW

News from Promega and the world of Life Sciences in the UK

August 2007

DRUG DISCOVERY & SCREENING EDITION

Issue 27

Summer Specials Inside...

Restriction Enzymes
Best Ever Prices

Transfection
30% OFF
Transfection Reagents

cDNA up to
50% OFF
Synthesis & Analysis

Cloning
30% OFF
Cloning Products

up to
50% OFF
Nucleic Acid Purification

More Great Offers

Competent Cells,
In Vitro Protein Expression
Caspase Assays
DNA Modifying Enzymes
Biochemicals
and more...





welcome



advances in Bioluminescent assays for G-Protein Coupled Receptors

We have chosen a new slogan, "Today Could Be the Day", because we believe that it best describes how you, our customers, feel about the work you do and why you do it. It also encapsulates your optimism of one day, perhaps today, finding answers to some of life's most challenging questions – identifying effective therapies or even cures for devastating diseases such as cancer or HIV. When that day comes, Promega hopes to have played a supporting role, by providing industry leading products and services that help you conduct your research faster, more reliably and more efficiently.

Promega is an integral part of the dynamic UK scientific research sector. A recent DTI report shows that the UK research output is second only to the US in terms of achievement, with over 13% of the world's share of the highest impact papers, with particularly strong performance in the life sciences. This strong performance is all the more creditable given that the UK's research funding ranks only 18th in the world and as a proportion of GDP, is the lowest of the G8 countries.

At Promega we are dedicated to supporting your research, not only with excellent products but also with excellent technical

support services. In a recent survey we ranked the highest in our industry on support services, with 95% of respondents rating our services as either excellent or good. The single greatest reason for this industry leading rating is the quality of advice given regarding the selection of products for new applications.

This issue of *Promega Now* features a report from the Clinical Transplantation Laboratory at Guys Hospital on the use of the Maxwell® 16 Nucleic acid purification platform for HLA typing of transplant patients. The findings of the report include a significant reduction in analysis time, freeing valuable resources to focus on other projects. Also enclosed with this issue is our new and upgraded *Promega Rewards* brochure, with an exciting range of gifts for everything from lab equipment, journal subscriptions and thesis binding, to high street vouchers for gifts to help you unwind after a hard day at the bench.

We hope you enjoy this issue of *Promega Now*.



Derek McCall
Managing Director, Promega UK

new Cytochrome P450 substrates

Promega is pleased to announce two new CYP3A4 luminogenic substrates. Both substrates are luciferin derivatives. Luciferin-PFBE has great selectivity for CYP3A enzymes (Figure 1) and therefore is ideal for cell-based induction studies. Luciferin-PPXE is extremely DMSO tolerant and so is the substrate of choice when DMSO cannot be avoided or minimised (Figure 2).

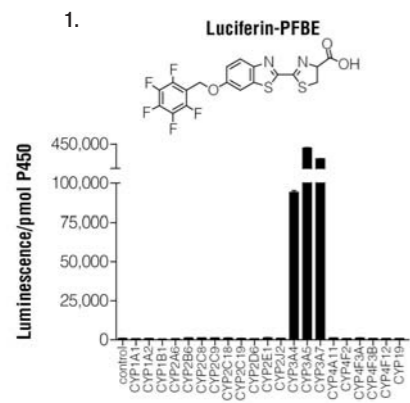


Figure 1: Substrate selectivity for P450 Enzymes.

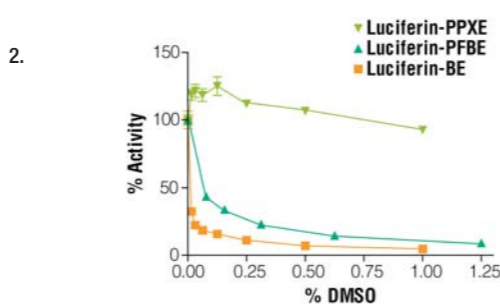


Figure 2: DMSO sensitivity – 30 min assays at 37°C with 1 pmol CYP3A4 and 50 µM substrate.

Product	Cat. No.	Size
P450-Glo CYP3A4 Assay (Luciferin – PPXE) DMSO-Tolerant Assay	V8911	10 ml
	V8912	50 ml
P450-Glo CYP3A4 Assay (Luciferin – PFBE) Cell-Based/Biochemical Assay	V8901	10 ml
	V8902	50 ml

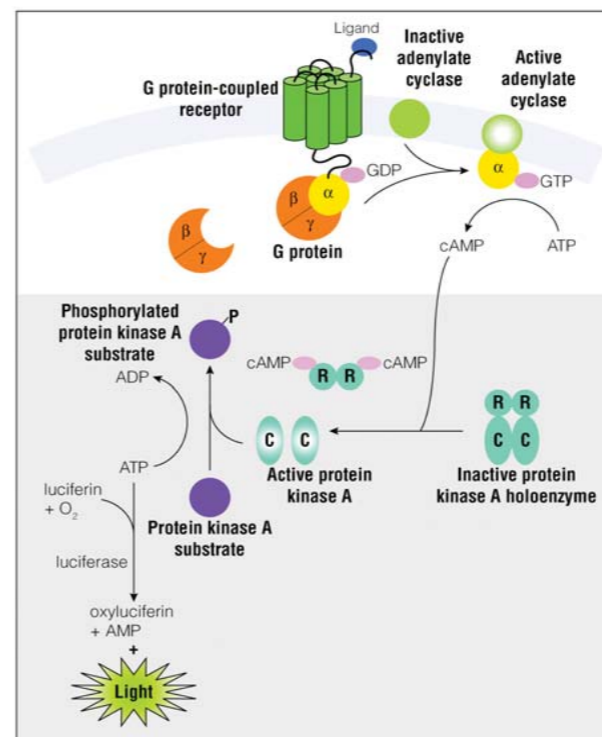
cAMP Assay with no antibody!

For the fast and simple measurement of Gs or Gi coupled receptor activity, try the new cAMP-Glo™ Assay. This homogeneous, bioluminescent assay offers high sensitivity and a wide dynamic range, which makes it ideal for 96, 384 or 1536-well plate applications.

Fast and Easy to Use – Complete in 60 minutes!

Excellent Signal:Background Ratios – The best ratios of any cAMP assays!

No Interference by Fluorescent Compounds – Proven luminescent technology!



Product	Cat. No.	Size
cAMP-Glo™ Assay	V1501	300 assays
	V1502	3,000 assays
	V1503	30,000 assays



To try a free sample of cAMP-Glo, visit www.promega.com/campglo



Did you know?
If your body's natural defences failed, the bacteria in your gut would consume you within 48 hours, eating you from the inside out.

CRE and NFAT Stable Cell Lines

Promega's GloResponse™ Cell Lines are pre-built, optimised luciferase reporter cell lines, designed for the rapid and convenient analysis of signalling through the NFAT or cAMP response pathways. These lines show high levels of induction and low background expression, resulting in large assay windows. In addition, they contain destabilised luciferase, which exhibits excellent responsiveness to transcriptional dynamics.

Product	Cat. No.
GloResponse™ CRE-luc2P HEK293 Cell Line	E8500
GloResponse™ NFAT-RE-luc2P HEK293 Cell Line	E8510

To find out more about the advantages of bioluminescence in cell based assays take a look at the latest issue of *Promega Notes*. Inside this bioluminescence special edition there are articles comparing bioluminescence to alternative detection technologies, demonstrating its advantages in sensitivity and biological relevance. Real world examples show applications in high throughput, high content screening for transcriptional regulatory elements, and in PGP assays and p450 screening.

To receive your free copy of *Promega Notes* simply subscribe at www.promega.com/pnotes



Contact Promega or complete the Fax Back form to request a P450 scientific poster describing the selectivity of different luciferin derivatives and comparative results from luminescent and fluorescent assays.



Maxwell[®] 16 technology at Guys Hospital tissue typing lab

GUY'S HOSPITAL

thomas' HOSPITAL TRUST
Main Entrance
Minor Injuries Unit

Background

The Clinical Transplantation Laboratory at Guy's and St Thomas' NHS Foundation Trust provides an accredited supra-regional Histocompatibility and Immunogenetics service (aka tissue typing) in support of renal, pancreas, liver and stem cell transplantation. Routine testing comprises 80% of the workload. However, the lab is also involved in various research collaborations involving associations of genetic polymorphism with disease, alloimmunity and HIV vaccine projects.

In the last few years the number of samples being processed by the lab has increased significantly.

Accredited Histocompatibility Laboratory

The group is working towards European Federation for Immunogenetics (EFI) accreditation. Clinical research requires validating each step, unless a recognised standardised method is used. "We used to validate each buffer every time it was made, and also checked each transfer step. With a standardised automated solution such as the Maxwell[®] 16 System, which provides pre-dispensed reagent cartridges, we no longer need to do that, and it also eliminates the chance of a sample mix up."

"We would have had to take on extra staff to be able to cope with the extra samples. The Maxwell speeds up our purification and that means you can get on with other work. I do not know what I'd do without it."

*Elli Kondeatis,
Head of Routine DNA, Clinical
Transplantation Laboratory*

Consistently good gDNA yield for low to medium resolution HLA typing

HLA Class I and II typing is often performed by a PCR-based technique using Sequence Specific Primers (SSP) to selectively amplify target sequences specific to a single allele or group of alleles. This requires 132 separate PCR reactions per sample. The yield provided by Maxwell[®] 16 (consistently between 30-100 ng gDNA) means that only one extraction per blood sample is required to complete all of these reactions.

Benefits of the Maxwell[®] 16 Purification System

Elli Kondeatis and her team evaluated other automated nucleic acid purification systems, however, none of these systems met their needs in the way achieved by Maxwell[®] 16. "The other systems gave different elution volumes each time we used them. They also splashed a lot and we were afraid of cross-contamination. In addition, we had problems with the tips, which clogged with un-lysed cells. The Maxwell on the other hand uses plungers to break up the cells and clogging is not an issue."

Sample capacity was important too. "The Maxwell processes 16 samples in 35 minutes. We only have to do 1-2 runs a day. The display shows each stage of the procedure and this helps us with our planning."

The time saving is considerable. "We used to need one person spending half a day every day on genomic DNA purification. Now there is much more time to spend on study and research projects."



Emma Lougee and Michael Clare, Guy's Hospital.



About the Maxwell16[®]

The Maxwell[®] 16 Purification System offers automated and truly walk-away purification that saves time and labour by eliminating reagent preparation, pipetting, and centrifugation steps. Comprised of a pre-programmed instrument and pre-filled

reagent cartridges, the system processes up to 16 samples in about 30 minutes. Simply add samples directly to the reagent cartridges and press start to purify DNA, RNA, or protein with consistent yield and purity.

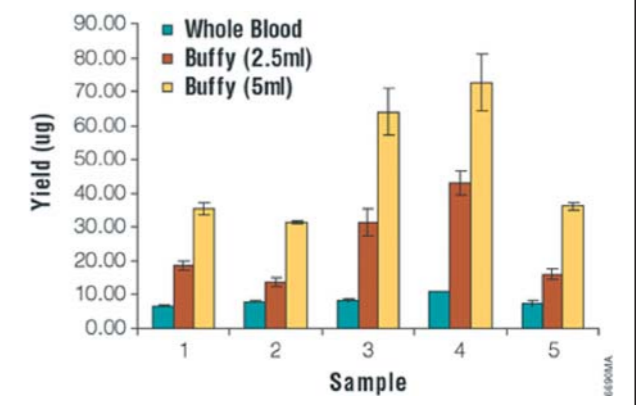
"We are happy with the Maxwell. It is an easy instrument to use, easy to set up, takes up minimal lab space and it helps us to speed up our tissue typing. Now we don't need a person to do gDNA extraction for half a day every day."

*Elli Kondeatis,
Head of Routine DNA,
Clinical Transplantation
Laboratory*

New

Automated gDNA Purification from Buffy Coat – 3 x more yield

Automated gDNA Purification from the buffy coat fraction of whole blood is the latest application launched by Promega for the Maxwell[®] 16 System, Promega's Personal Automation™ platform. The new automated method provides fast, fully automated, standardised gDNA from the buffy coat fraction of whole blood. Expect 2-3 times the yield of comparable Robotic Purification Systems.



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Did you know?

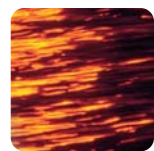
The only bone not broken so far in a ski accident is one located in the inner ear.



Did you know?

15 million blood cells are produced and destroyed in the body every second.

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news & events



Right: Mayowa Osundiji, University of Cambridge.
Left: Gordon Ford, Technical Sales Specialist, Promega.



From left to right: Stephen Grigg of St Cross College, James Locke of the University of Warwick, Anja Rovio of the University of Tampere, and Gordon Ford, Technical Sales Specialist, Promega.

Promega UK Young Scientist Award for Biochemistry, Pharmacology & Physiology 2007

Promega's Young Scientist Award for Biochemistry was held at the joint meeting of the Biochemical, Pharmacology and Physiology Societies this year. As a result the competition was opened up to members of all three societies, hence the new title for 2007.

The winner of this year's award was Mayowa Osundiji of the University of Cambridge, UK with the abstract 'Hypothalamic glucokinase plays a critical role in the regulation of protective feeding to glucoprivation'. Mayowa gave an excellent presentation at the meeting at The SECC in Glasgow along with the 5 other finalists.

The runners up were Talitha Kerrigan of University of Leeds and Lucy Norling of The William Harvey Research Institute in London. All six finalists were guests at the Gala dinner, held in The Hilton Hotel, where the winner and 2 runners up were awarded their prizes. The winner received a specially commissioned award and a cheque for £600. The runners up received £400 and £200 respectively and all three were given a year's subscription to 'Science'.

Promega supports awards for Young Scientists in Immunology, Biochemistry and Genetics.

For information on participating in our Young Life Scientist of the Year Awards, please visit www.promega.com/uk/ylysya

Promega Young Geneticist 2007

Promega's Young Geneticist Award for 2007 was held at the joint meeting of the Genetics Society and the British Societies for Cell and Developmental Biology.

The winner of this year's award was James Locke of the University of Warwick with the abstract 'Directing Experiments on the Plant Circadian Clock using Modeling'. James gave an excellent presentation at the meeting at The Heriot Watt University in Edinburgh in March, joining us from his current residence in California.

This year's runners up were Stephen Grigg of St Cross College and Anja Rovio of the University of Tampere. All of our winners were awarded their prizes during the conference dinner held at the unique 'Dynamic Earth' venue in Edinburgh.

Promega supports awards for Young Scientists in Immunology, Biochemistry and Genetics.



Date	Event Title	Event Location
2-3 October 2007	ERLIG- Drug Discovery	East Midlands Conference Centre, UK
17 October 2007	ERBI Bench2Boardroom	Chilford Hall, Cambridgeshire
18-20 September 2007	British Human Genetics Conference	University of York

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Did you know?

The surface area of a human lung is equivalent to a tennis court.



special offers



Restriction Enzymes

Best Ever Prices

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30% OFF Cloning Products

Biochemicals

30% OFF Biochemicals

cDNA

up to 50% OFF Synthesis & Analysis

Caspase Assays

50% OFF Caspase Assays

Transfection

30% OFF Transfection Reagents

Competent Cells

30% OFF Competent Cells

up to

50% OFF Nucleic Acid Purification

Take a look at these great summertime offers. There's even more online at www.promega.com/uk/summer

Restriction Enzymes

We are guaranteeing the best price you can get for Restriction Enzymes this summer. Check out the prices online at www.promega.com/uk/summer and if you find a better price, let us know and we'll beat it!

Cloning

Cat No.	Description	List Price	Discount	Offer Price
A1360	pGEM-T ⁺ Easy Vector System I, 20 rxn	£132	20%	£106
M9910	TSAP, Thermosensitive Alkaline Phosphatase, 100 U	£31	50%	£16
M8201	Shrimp Alkaline Phosphatase, 500 U	£48	30%	£34
M2201	DNA Polymerase 1 (Klenow) fragment	£55	30%	£39
M4211	T4 DNA Polymerase, 100 U	£66	30%	£46
M8221	LigaFast TM Rapid DNA Ligation System, 30 rxn	£50	30%	£35
G7541	Benchtop 1 Kb DNA Ladder, 100 lanes	£91	30%	£64
G8291	Benchtop 100 bp DNA ladder, 50 lanes	£59	30%	£41
G7511	Benchtop ΦX174 DNA/HaeIII marker, 50 lanes	£93	30%	£65

Biochemicals

30% off biochemicals for every day laboratory applications. See online at www.promega.com/uk/summer

Reverse Transcription and cDNA Analysis

Cat No.	Description	List Price	Discount	Offer Price
A3500	AMV Reverse Transcription System, 100 rxn	£339	30%	£237
M3682	M-MLV Reverse Transcriptase RNase H Minus, Point Mutant, 10,000 U	£94	30%	£66
M5108	AMV Reverse Transcriptase, 1,000 U	£178	30%	£125
M4281	Ribonuclease H, 50 U	£109	30%	£76
Z4000	Chipshot Indirect cDNA Labelling and Clean-Up System, 25 rxn	£348	50%	£174
Z4100	Chipshot Direct cDNA Labelling and Clean-Up System, 25 rxn	£324	50%	£162
A1250	Access RT-PCR System, 100 rxn	£342	20%	£274
A1280	Access RT-PCR System, 500 rxn	£1,373	20%	£1,098

Caspase Assays

Cat No.	Description	List Price	Discount	Offer Price
G8090	Caspase-Glo [®] 3/7 Assay, 2.5 ml	£68	50%	£34
G8200	Caspase-Glo [®] 8 Assay, 2.5 ml	£68	50%	£34
G8210	Caspase-Glo [®] 9 Assay, 2.5 ml	£68	50%	£34

Transfection Reagents

Cat No.	Description	List Price	Discount	Offer Price
E2431	TransFast Transfection Reagent, 1.2 mg	£186	30%	£130
E5052	CodeBreaker siRNA Transfection Reagent, 0.4 ml	£154	30%	£107

Competent Cells

Cat No.	Description	List Price	Discount	Offer Price
L2001	JM109 Competent Cells, 1 ml	£91	30%	£64
L2011	HB101 Competent Cells, 1 ml	£79	30%	£55
L3001	Single Step KRX Competent Cells, 1 ml	£120	30%	£84

Nucleic Acid Purification

Cat No.	Description	List Price	Discount	Offer Price
A1330	Wizard [®] Plus SV Plasmid Minipreps, 50 preps	£56	30%	£39
A2492	PureYield Plasmid Midiprep System, 25 preps	£116	30%	£81
A9281	Wizard [®] SV Gel and PCR Clean-Up System, 50 preps	£56	30%	£39
Z3101	SV Total RNA Isolation System, 10 preps	£46	50%	£23

To take advantage of these great discounts simply order in the normal way, quoting Summer07



To order any of the above products and receive your discount, please quote promotional code **Summer07**. Offer valid to 30th September.

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