

Tenth of Quirky Creature's Active Genes Are Foreign: Believed to 'Ingest' DNA from Other Simple Organisms

“Up to 10 per cent of the active genes of an organism that has survived 80 million years without sex are foreign, a new study from the University of Cambridge and Imperial College London reveals. The asexual organism, the Bdelloid rotifer, has acquired a tenth of its active genes from bacteria and other simple organisms like fungi and algae....”

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While Bdelloid rotifer have their way to edit their genes [Applied StemCell](#) & [GENTAUR](#) offer you the unique [TARGATT™](#) technology for gene editing.

***Site-Specific Transgenic Mouse**

- [Embryos](#) High quality **H11(Hipp11)** and **ROSA26 TARGATT™** frozen embryos.
- [Transgenic Kit](#) Using our TARGATT™ technology, you can generate your own knock-in mouse in 3 months. The kit includes mRNA, pBT, control mRNA and miTE buffer.
- [Supporting Materials](#) We offer a diverse array of supporting materials and plasmids for our TARGATT™ transgenic knock-in mice products.

***Cell Culture**

- [MEF Feeder Cells](#) We are MEF experts offering a wide selection of stable mouse embryonic fibroblast (MEF cells) as feeder cells isolated from CF-1, DR4, and SNL (STO feeder cells). Our MEF feeder cells have an average viability of > 95%, and have been used by more than 200 clients in both academic and industrial labs. Also see out our neo-resistant MEF feeder cells for the culture of ES/iPS cells under G418 selection.
- [Medium](#) Specialty and basal media optimized for embryonic stem cell (ESC) and induced pluripotent stem cell (iPSC) culture.
- [FBS](#) Two grades of fetal bovine serum (FBS) for either germline transmission or embryonic stem cells. Mouse embryonic stem cells (mESCs) in ESC-Sure FBS maintain normal morphology and pluripotency.
- [Cytokines](#) Key stem cell growth and stem cell differentiation factors that complement our existing products and services for stem cell expansion, stem cell generation, stem cell differentiation, and stem cell characterization.
- [ASC Small Molecules](#) Small molecules to complement your research.
- [3D Plates](#) 3D Culture & Expansion System

***Stem Cell Research**

- [Stem Cell Generation](#) We offer a wide selection of retroviruses and microRNA for iPS generation. Somatic cells can be reprogrammed into induced pluripotent stem cells (iPSC) by introducing reprogramming factors. MicroRNA can also effectively be used for iPS generation by liposomal transfection.

- [Stem Cell Characterization](#) We offer multiple products for embryonic stem cell (ESC) and induced pluripotent stem cell (iPSC) characterization. See below for our pluripotency protein marker kits, pluripotency mRNA marker kits, stem cell gene arrays and other individual components for our characterization kits.
- [Stem Cell Differentiation](#) We offer multiple solutions for (ESC/iPSC) embryonic stem cell differentiation, induced pluripotent stem cell differentiation including human ESC/iPSC neural stem cell generation kits, dendritic cell generation and endothelial differentiation kits.

***Stem Cell Lines**

- [Mouse ESC](#) Applied StemCell Inc. (ASC) offers mouse embryonic stem cell lines: C57BL/6, C57BL/129SvJ, 129, BALB/c, C57BL/6 ALBINO.
- [Human iPSCs](#) Human induced pluripotent stem cell (iPSC) lines generated by retrovirus vectors or episomal expression.

***Gene Modified Disease Cells**

- [TARGATT™ Disease Stem Cells & Disease Cells](#) Human Disease Stem Cells from Primary Cells.
- [TARGATT™ Disease iPSC](#) TARGATT™ Human Disease Induced Pluripotent Stem Cells (iPSCs). Licensing agreement is required.

***Primary Cell, cDNA, RNA**

- [Disease Human Primary Cells](#) Disease Human Primary Cells, cDNA, RNA
- [Normal Human Primary Cells](#) Normal Human Primary Cells, cDNA, RNA
- [Mouse Primary Cell](#) Mouse Primary Cell: Mouse Aortic Smooth Muscle Cells

*** Molecular Cloning Reagents**

- [DNA Extraction / Purification](#) DNA extraction and purification options.
- [Genome Extraction](#) Genome extraction kits.
- [PCR Reagent](#) Taq DNA polymerase.
- [Plasmid Extraction](#) Plasmid extraction kits.
- [RNA Extraction](#) RNA extraction reagents and products.
- [RT Quantative PCR](#) Real time quantative PCR reagents.
- [RT-PCR Reagent](#) PCR reagent kits

***How to measure gene expression in *real time* for periods up to *several days*?**

Luminescence measurement device for real-time reporter assay

AB-2550 Kronos Dio

AB-2550 Kronos Dio is a luminescence measurement device (luminometer) that equips a photomultiplier tube as a detector. This device is suitable to *monitor gene expression of culture cells and cultured tissue slice at fixed intervals over a period of several hours to several days* using 35mm diameter culture dish as a sample

container.

For the long term cultures, it is possible not only to control temperature in the cabinet by the air circulation but also to introduce CO₂. Additionally, because an optical filter is built in, it is possible to monitor up to three kinds of gene expression using luciferase with different colors of luminescence.

Using Kronos Dio you reduce the risk of contamination and save your time!

You will work smarter, not harder using this unique piece of equipment!

***PyroHotStart Taq PreMix – The Master of the mastermixes**

K-2611 AccuPower® PyroHotStart Taq PCR PreMix – 127 EUR

(Available in 96 and 480 tubes and 20ul and 50ul reactions)

-Pyro HotStart series

AccuPower® Gold Multiplex PCR PreMix – 150 EUR

* Amplifying up to 20 targets in a single tube

AccuPower® HotStart PCR PreMix – 130 EUR

* Unique HotStart method for DNA amplification

AccuPower® HotStart PCR PreMix (with UDG) – 147 EUR

* For highly-specific DNA amplification

* Contains UDG to prevent carryover contamination

-For cDNA Synthesis, RT-PCR, and qRT-PCR

E-3121 M-MLV Reverse Transcriptase, 10,000 U, 5 X Reaction Buffer, 0.5 mL, 100 mM DTT, 0.3 mL, 10mM dNTPs mixture solution 0.2ml – 128 EUR

For genes up to 9 kb! - More full length fragments within 10 minutes!

AccuPower® RocketScript™ RT-qPCR PreMix – 275 EUR

* One-step RT-qPCR PreMix (Taqman probe method)

* AccuPower® RocketScript™ RT-qPCR PreMix and 2X MasterMix is used for a new concept of HotStart RT

2X Greenstar MasterMix solution - 165 EUR

* Ready-to-use cocktail containing all components for the amplification and detection of DNA in real-time qPCR

AccuPower® Plus Dualstar™ qPCR PreMix – 150 EUR

* Best real-time PCR kits for probe

* AccuPower® Plus Dualstar™ qPCR PreMix & 2X MasterMix

-For ligation of DNA, TA cloning and other recombinant DNA applications - T4 DNA Ligase

E-3061 T4 DNA Ligase, 20,000 U – 110 EUR

E-3062 T4 DNA Ligase, 100,000 U(5 x 20,000 U) – 160 EUR

This enzyme will ligate DNA from blunt-end and cohesive-end termini (Including sticky ends for TA Cloning) as well as repair single stranded nicks in duplex DNA, RNA, or DNA/RNA hybrids.

-T7 RNA Polymerase

E-3041 T7 RNA Polymerase, 2,000 U – 110 EUR

E-3042 T7 RNA Polymerase, 10,000 U(5 x 2,000 U) – 160 EUR

A DNA dependent RNA polymerase with a highly specificity for the initiation of transcription at T7 RNA polymerase promoters. It is widely used for the rapid synthesis in vitro of specific RNAs.

1000 Natural or Colorful Tubes for only 130 EUR

(Natural, Green, Orange, Red, Violet, Yellow, Blue)

K-2260-3 AccuPower PCR PreMix thin wall 96 well semi skirted plate – 129 EUR

Gentaur's Opaque White 96-well Semi-skirted PCR plate is made of polypropylene material, is especially designed for Real-Time PCR to measure fluorescence sensitively in result. Compatible with mostly available PCR instruments. Certified to be RNase and DNase free.

3111-50 0.2 ml PCR Tube for Real-Time PCR (250 Strips) – 249 EUR

***ExiProgen™ - DNA&RNA purification + coupled transcription/translation system for protein synthesis**

ExiProgen™ can purify Nucleic Acids from several sources, making it one of the most versatile systems available! FOR ONLY 12500 EUR!

(More information here: <http://pcrtechnique.com/ExiProgen-overview.html>)

***The BULLET BLENDER® - sonication alternative**

The easiest and coolest way to lyse cells and homogenize tissue.

BBY24M-CE Bullet Blender Storm homogenizer - 3372 EUR Our most powerful model!

***Illuminators**

Whole New designs! Tranilluminators are the first choice for analytical applications with cutting-edge construction for increased performance and efficiency.

(See all our models here: http://gentaurpromo.com/technology_with_ideas/)

UltraBright LED Transilluminator

The UltraBright LED Transilluminator is designed for viewing stained gels on the laboratory bench, or within gel documentation systems. Light from the LED source inside the instrument producing light with a narrow emission peak centered at approximately 470 nm, effective for the excitation of nucleic acid and protein stains such EtBr, SYBR® Safe, SYBR Gold, SYBR® Green I & II, SYPRO® Ruby, SYPRO® Orange, Coomassie Fluor™ Orange stains, GelGreen, GelRed and Lumitein™ Protein Gel Stain

LB-17N LED transilluminator, Dual wavelengths, UltraBright and Uniform – 711 EUR

LB-17 LED transilluminator, Triple wavelengths, UltraBright and Uniform – 737 EUR

LB-16 UltraBright LED Transilluminator, 470nm - 685 EUR

UltraSlim LED Illuminator

The UltraSlim LED illuminator is designed for viewing stained gels on the laboratory bench, or within gel documentation systems. The dimensions is only 210(W) x 210(D) x 30(H)mm. Lighting from the LED source inside the instrument produces blue light with a narrow emission peak centered at approximately 470 nm, which is more effective for the excitation of most nucleic acid and protein

stains.

[SLB-01W UltraSlim LED Illuminator, WHITE, 470nm, easy to cut gel](#) – 529 EUR

UltraBright UV Transilluminator

All Maestrogen UltraBright UV transilluminators carry a two year warranty. All UV transilluminators are equipped with a new-design UV blocking cover, adjustable to different angles for access to the work surface.

[MLB-21 UltraBright UV Transilluminator, 302nm/365nm, large viewing](#) - 744 EUR

***Neptune Barrier Tips**

GENTAUR offers **massive discounts** of all **Neptune Barrier Tips**

Don't miss our **LabPets** program. Order Neptune tips and we will send You a furry dolphin, whale or shark for your laboratory!

1 box [10x96 Tips](#) for 59 EUR

10boxes [10x96 Tips](#) + 1 labpet of choice for 480 EUR

20boxes [10x96 Tips](#)+ 3 labpets for 880 EUR

30boxes [10x96Tips](#) + 5 labpets for 1290 EUR

Choose and mix tips 10 ul ,20 ul, 100 ul, 200 ul, 300 ul, 1000 ul, 1250 ul !

***Extract DNA from whole cells in LESS THAN TWO Minutes with PureLyse®**

Key Features:

- Ultra-rapid, easy to use protocol requires only two steps and can be performed in under two minutes.
- Perform cell lysis and DNA binding in one step, eliminating the need for additional equipment and valuable lab space.
- Prepare PCR-ready samples with an extraction efficiency over 70% and LOD of less than 50 CFUs.

Applications:

- Cell Development Research
- Forensics Testing
- Genomics Research
- Infectious Disease Studies
- Any Protocol That Requires Nucleic Acid Extraction

Specifications:

- Works with genomic DNA and RNA
- Can efficiently disrupt even hard-to-lyse cell types

More information here: http://gentaurpromo.com/next_gen_sample_prep/purelyse.html