

Dear customer

We are delighted to send you the third edition of our «Life Sciences News» Vol. 3 including some of the latest updates of our Life Sciences product portfolio. Our Marketing and Sales Team will be more than happy to support and assist you for any further information.

Your sincerely

**Chemie Brunschwig AG Team**

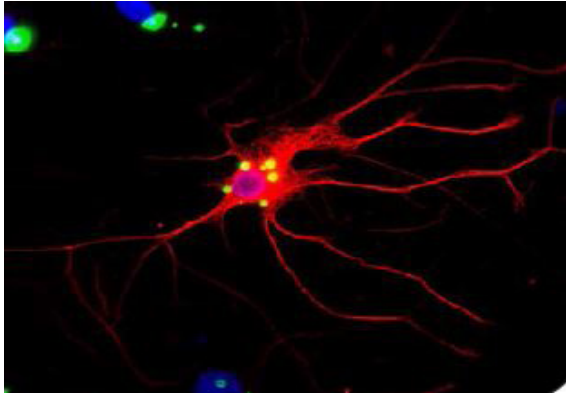


# **LIFE SCIENCES NEWS VOL. 3** MAY 2017

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**NEW**



## **Particles and Microspheres from Bangs Laboratories**

### **Two new microsphere Standards for Instrument QC:**

**ViaCheck™ 25% Viability** – ViaCheck™ standards mimic the light scattering characteristics of “live” and “dead” cells in the trypan blue dye exclusion method and may be used to confirm the capabilities and verify the performance of image-based cell viability instruments.

-> ask for Technical Data Sheet #729 & 736

**Quantum™ QC** – is a multi-intensity, multi-fluorescent standard that is intended for use as an in-depth tool for daily cytometer QC and is appropriate for use with all lasers and detectors.

-> ask for Product Data Sheet #725 & 725A or Safety Data Sheet #ST335

Polysciences offers the most comprehensive range of particle solutions. Source of organic, inorganic, biodegradable, magnetic, fluorescent, dyed and specific antibody as well as general protein coated particles in diameters spanning the range of 40nm to 10nm.

### **Microspheres & Particles**

- Polymer Microspheres
- Fluorescent Microspheres
- Dyed Microspheres
- Silica Microspheres
- Magnetic Microspheres and Particles
- Flow Cytometry
- Instrument Standards
- Accessory Reagents & Companion Products
- Magnetic Bioseparations
- Additional Microspheres
- BioMag® & BioMag®Plus



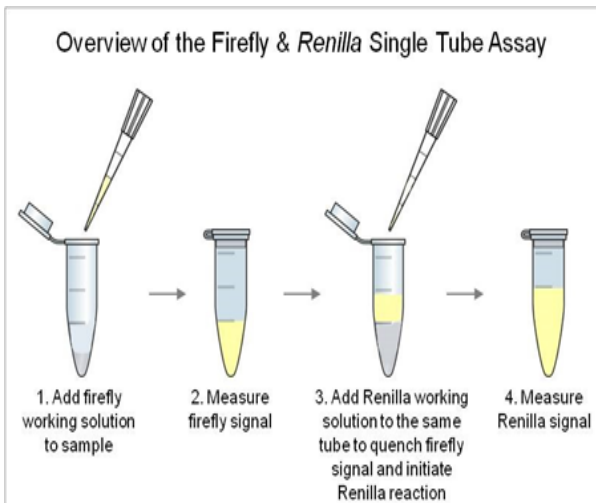
Product catalog or product flyers are available, please ask.



**SPECIAL OFFER: 15% discount on all products listed below!**

Product Description	Cat-No.	Size	Special Price*
Cell Viability Control 0% viable, 1x10 <sup>6</sup>	24622-20 / VC10B-20	20ml	<b>CHF 483.05</b>
Cell Viability Control 25% viable, 1x10 <sup>6</sup>	25997-20 / VC25B-20	20ml	<b>CHF 483.05</b>
Cell Viability Control 50% viable, 1x10 <sup>6</sup>	24623-20 / VC20B-20	20ml	<b>CHF 483.05</b>
Cell Viability Control 75% viable, 1x10 <sup>6</sup>	24624-20 / VC30B-20	20ml	<b>CHF 483.05</b>
Cell Viability Control 90% viable, 1x10 <sup>6</sup>	24625-20 / VC40B-20	20ml	<b>CHF 483.05</b>
Cell Viability Control 100% viable, 1x10 <sup>6</sup>	24626-20 / VC50B-20	20ml	<b>CHF 483.05</b>
Concentration Controls, 1x10 <sup>6</sup>	24627-20 / VC60N-20	20ml	<b>CHF 196.35</b>
Quantum QC™	BLI725B	100tests	<b>CHF 298.52</b>

\*Prices are net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017



## Firefly & Renilla Luciferase Single Tube Assay Kits opportunity from Biotium

For measurement of Firefly and Renilla luciferase activities in transfected cell reporter assays. Firefly luciferase is widely used as a reporter for studying gene regulation and function and for pharmaceutical screening.

### Features of our Firefly & Renilla Luciferase Single Tube Assay Kits:

- simplified protocol
- water soluble coelenterazine for easier handling and storage
- sequentially measurement of Firefly & Renilla luciferase activities in the same sample in a single tube
- high sensitivity and linearity
- attractive prices vs competitors (see table below)



A wide range of Firefly and Renilla Luciferase assay kits are available, please ask us.



**SPECIAL OFFER: 20% discount on all Single Tube Assay Kits.**

Promega assay	Promega catalog	Biotium alternative	Biotium catalog	Assay type	Notes
Steady-Glo® Assay System	E2510 E2520 E2550	Steady-Luc™ Firefly HTS Assay Kit	30028	Glow-type Signal half-life 3h	Signal half-life ~3 hours. Luciferase substrate is added to assay buffer as needed, so signal doesn't drop during kit storage.
		Steady-Luc™ Firefly HTS Assay Kit (Lyophilized)	30028L	Glow-type Signal half-life 3h	Signal half-life ~3 hours. Lyophilized format for convenient shipping and storage.
Firefly Luciferase Assay System	E1483 E1500 E1501 E4030 E4530 E4550	Firefly Luciferase Assay Kit 2.0	30085	Flash-type	Luciferase substrate is added to assay buffer as needed, so signal doesn't drop during kit storage.
		Firefly Luciferase Assay Kit (Lyophilized)	30075	Flash-type	Lyophilized format for convenient shipping and storage.
Renilla Luciferase Assay System	E2810 E2820	Renilla Luciferase Assay Kit 2.0	30082	Flash-type	Features Biotium's water-soluble Aquaphile™ Coelenterazine
Dual-Luciferase® Assay System (Firefly & Renilla)	E1910 E1960 E1980	Firefly & Renilla Luciferase Single Tube Assay Kit	30081	Flash-type	Sequentially measure firefly and Renilla luciferase activities in the same sample in one tube.
CellTiter-Glo® Luminescent Cell Viability Assay	G7570 G7571 G7572 G7573	ATP-Glo™ Cell Viability Assay	30020	Flash-type	Cell Titer Glo® is a glow type assay (3h half-life); ATP-Glo™ is a flash type assay (signal stable for 1 minute)

Product Description	Cat-No.	Size	Special Price*
Firefly & Renilla Luciferase Single Tube Assay Kit	30081-T	50 assay	<b>CHF 110.75</b>
Firefly & Renilla Luciferase Single Tube Assay Kit	30081-1	150 assay	<b>CHF 233.00</b>
Firefly & Renilla Luciferase Single Tube Assay Kit	30081-2	1000 assay	<b>CHF 967.70</b>

\*Prices are net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017

**NEW**



## ***A rapid and efficient Neural Induction of hPSCs in a Monolayer Culture System from Sciencell***

### **HPSC Neural Induction Medium**

HPSC Neural Induction Medium (PSCNIM) is a serum-free medium to differentiate human pluripotent stem cells (hPSCs) to neural stem cells (NSCs) under adherent culture in as short as 7 days (Figure 1).

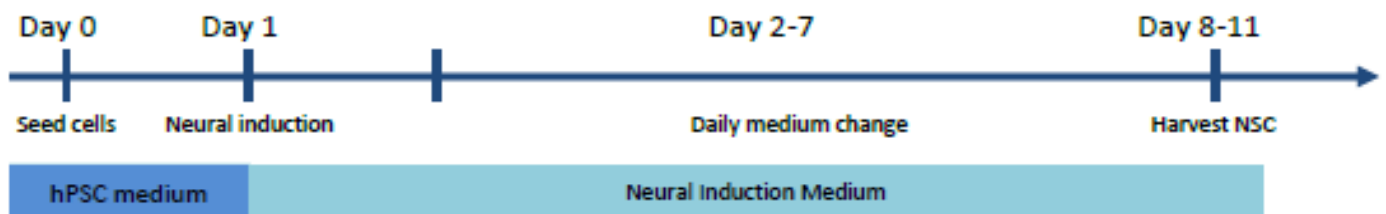
The homogenous neural epithelium is generated at high efficiency using PSCNIM with more than 90% of cells expressing the NSC markers NESTIN and SOX2, while the pluripotency marker NANOG expression is lost.

The hPSC-derived NSCs can form neural rosettes and be expanded in EGF and FGF containing medium, or further differentiated into neurons and astrocytes.

#### **Advantages:**

- **Fast:** Obtain NSCs in only 7 days
- **High efficiency:** >90% of cells are NESTIN positive
- **Simple:** No need for embryoid body formation
- **Robust:** Verified for both hESC and hiPSC lines
- **Convenient Packaging :** No need to aliquot

**Figure 1. Schematic of neural induction:**



Complete flyer for „Human Pluripotent Stem Cell Products“ and „Human Mesenchymal Stem Cell Products“ are available on our website.

<b>Product Description</b>	<b>Cat-No.</b>	<b>Size</b>	<b>List Price*</b>
HPSC Neural Induction Medium	5931-100	100ml	CHF 175.--
HPSC Neural Induction Medium	5931	500ml	CHF 532.--

\* Prices are net, excl. import & delivery charge of CHF 159.-/order, excl. V.A.T. and subject to change

**NEW**

## PCR Essentials from Canvax

Since 2001, Canvax has been an Original Manufacturer and Supplier of the Most Innovative Solutions, Services, Kits and R&D Reagents inside the Molecular Biology field.

Awarded as most Innovative Company in 2014, with 10 Technologies Patented Worldwide or Unprecedented Milestones achieved, Canvax markets all its unmatched know-how, exclusive Expertise and worldwide leading R&D knowledge through its **Reliable, Cost-effective and Easy-to-use** Innovative Solutions.

For a complete listing of Canvax's Highly Innovative Molecular Biology solutions, please visit: [www.canvaxbio.com](http://www.canvaxbio.com)



Complete product catalogue or samples for testing are available, please ask us.



TRY

**SPECIAL OFFER: benefit from attractive prices on Essentials listed below!**



Product Description	Cat-No.	Size	Special Price*
Horse-Power™ Taq DNA Polymerase, 5 U/μL	P0023	500 U	<b>CHF 49.30</b>
Horse-Power™ Taq DNA Polymerase, MasterMix (2x)	P0035	250 rx	<b>CHF 109.90</b>
HotBegan™ Hot Start Taq-DNA Polymerase, 5 U/μL	P0028	500 U	<b>CHF 109.90</b>
HotBegan™ Hot Start Taq-DNA Polymerase, MasterMix (2x)	P0030	250 rx	<b>CHF 56.90</b>
FastPANGEA™ High Fidelity DNA Polymerase, 2 U/μL	P0033	500 units	<b>CHF 336.90</b>
FastPANGEA™ High Fidelity DNA Polymerase, MasterMix (2x)	P0061	200 rxn	<b>CHF 184.30</b>
DNA Polymerase I (Klenow Fragment), 10 U/μL	P0041	500 units	<b>CHF 153.40</b>
T4 DNA Polymerase, 5 U/μL	P0043	500 units	<b>CHF 305.10</b>
M-MLV Reverse Transcriptase, 200 u/μL	P0073	10,000 U	<b>CHF 114.20</b>
AMV Reverse Transcriptase, 10 u/μL	P0070	300 U	<b>CHF 119.90</b>
T4 DNA Ligase, 5 Weiss Units/ug	CL005	300 U	<b>CHF 68.90</b>
TruePure™ dNTP Mix, 10 mM	N0031-S	1 ml	<b>CHF 64.30</b>
TruePure™ dNTP Mix, 10 mM	N0031	5 x 1 ml	<b>CHF 174.90</b>
TruePure™ dNTP Set, 100 mM	N0098	4 x 0.4 ml	<b>CHF 149.20</b>
Proteinase K (Lyophilized)	EZ0012	5 x 30 mg	<b>CHF 110.80</b>

\* Prices are net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017

**NEW**

## Introducing Corning® CoolCell® Cryogenic Storage Solutions



Corning® CoolCell® technology utilizes a thermo-conductive alloy core and highly insulated outer material to control the rate of heat removal and provide reproducible cell cryopreservation.

Unique features of controlled-rate freezing with Corning® CoolCell® include:

- Ease of use
- Alcohol and fluid-free freezing
- Lower total cost in use than alcohol-based devices
- High cell recovery and cell viability
- Reproducibility
- Simple, consistent way to standardize controlled- rate freezing
- Ready to use again in 5 minutes
- No lid stick due to frozen condensation

**i**

Complete brochure, product flyer or specifications are available, please ask us.

**%**

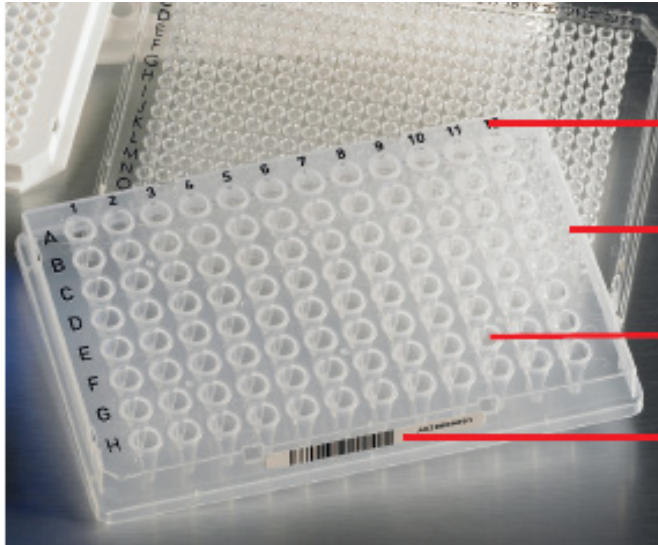
**SPECIAL OFFER: Buy any Corning® CoolCell® unit with 10% discount & get a free box of cryogenic vial grippers as well!**



Product Description	Capacity	Cat-No.	Size	Special Price*
Corning® CoolCell® Containers				
CoolCell, purple cell freezing container	12 vials (1 or 2 ml)	432000	1 Pack	<b>CHF 152.64</b>
CoolCell LX, purple cell freezing container	12 vials (1 or 2 ml)	432001	1 Pack	<b>CHF 191.25</b>
CoolCell LX, green cell freezing container	12 vials (1 or 2 ml)	432002	1 Pack	<b>CHF 191.25</b>
CoolCell LX, orange cell freezing container	12 vials (1 or 2 ml)	432003	1 Pack	<b>CHF 191.25</b>
CoolCell LX, pink cell freezing container	12 vials (1 or 2 ml)	432004	1 Pack	<b>CHF 191.25</b>
CoolCell FTS30, purple cell freezing container	30 vials (1 or 2 ml)	432006	1 Pack	<b>CHF 522.90</b>
CoolCell FTS30, orange cell freezing container	30 vials (1 or 2 ml)	432007	1 Pack	<b>CHF 522.90</b>
CoolCell FTS30, green cell freezing container	30 vials (1 or 2 ml)	432008	1 Pack	<b>CHF 522.90</b>
CoolCell FTS30, pink cell freezing container	30 vials (1 or 2 ml)	432009	1 Pack	<b>CHF 522.90</b>
CoolCell 5ml LX, purple cell freezing container	12 vials (4 or 5 ml)	432005	1 Pack	<b>CHF 256.50</b>
Free Grippers Given				
Cryogenic vial grippers, multi-colored		432136	5 Pack	<b>free</b>

\* Prices are net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017

# PCR Microplates - designed for use with standard, gradient & real-time PCR applications from Axygen



Alpha-numerical black lettering

Variety of colors available

RNase-/DNase-free, human gDNA-free, nonpyrogenic

Bar coding is available

## Axygen® PCR Microplates Compatibility Chart

Type	Format	Brand	Application	Color	Skirt
Plates	96-well	Applied	PCR	Clear	Fast block
			Q-PCR	Clear	Non-fast block
		Roche	Q-PCR	White	Fast block
			Q-PCR	White	Non-fast block
		Other	PCR	Clear	Half skirt
				White	Skirt
	Q-PCR		Clear	Half skirt	
			White	Non skirt	
	384-well	Roche	Q-PCR	White	Skirt
			Q-PCR	White	Skirt
		Other	Q-PCR	Clear	Skirt
				White	Skirt
PCR			Clear	Skirt	
			Clear	Skirt	

## Axygen Sealing Films

Type	Application	Material
Films	PCR	Aluminum
		Polyester
	Q-PCR	UltraClear

## Microplate Compatibility Catalog Numbers

Number	Corning Cat. No.
	PCR-96-LP-AB-C
	PCR-96-AB-C
	PCR-96-HS-AC-C
	PCR-96-LC480-W
	PCR-96-FS-C
	PCR-96M2-HS-C
	PCR-96-FLT-C
	PCR-96-LP-FLT-C
	PCR-96-HS-AC-W
	PCR-96-LP-FLT-W
	PCR-384M2-C
	PCR-384-LC480-W
	PCR-AS-200
	PCR-AS-600
	PCR-TS
	UC-500



Contact us if you would like the complete product catalog, a price offer or samples for testing.



## **ELISA/CLIA Kits from Cloud-Clone, Cusabio and Elabsience**

### **Are you looking for Elisa/CLIA Kits?**

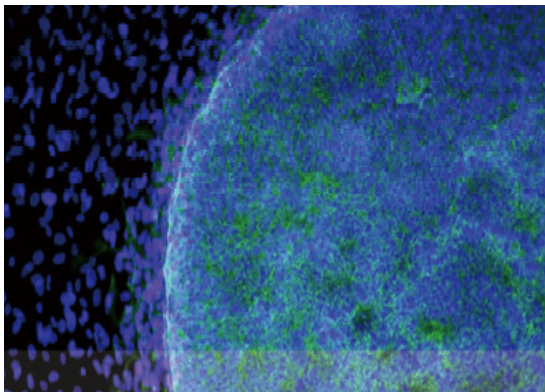
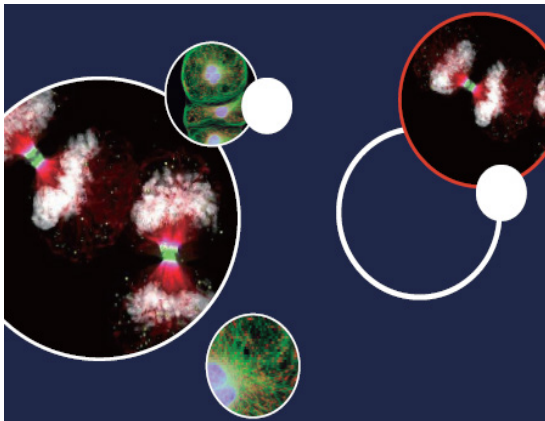
We are pleased to introduce **Cloud-Clone Corp., Cusabio and Elabsience** our 3 suppliers specializing in the production of high quality ELISA & CLIA Kits.

### **This means over 12'000 Immuno Assay Kits available, covering 12 species\***

(\*Human - Mouse - Rat - Monkey - Rabbit - Caprine – Ovine – Equine – Bovine – Porcine – Gallus – Canine)

### **that cover the following research areas:**

- Apoptosis
- Cytokines & Growth Factors
- Stem Cells research
- Cardiovascular research
- Metabolism research
- Cell Biology research
- Neuroscience Research
- Cancer Research
- Signal Transduction
- Immunology...



Product catalogs, manuals or free samples (kit of 24T) are available, please contact us.



**TRY**

#### **SPECIAL OFFER:**



- **25% Off\*** on all ELISA Kits from Cloud-Clone Corp.

- **20% Off\*** on all Elisa Kits from Cusabio

- **20% Off\*** on all Elisa Kits for Cytokines & Stem Cells Research from Elabsience

Products are listed on our website  
**Promo Code: ELISAKITS17**

\* on list prices, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017



**NEW**



## **Panexin - chemically defined serum replacement from PAN Biotech**

### **No more serum testing!**

### **Enjoy the easy handling & the full reproducibility**

Panexin basic can be used for the cultivation of adherent and non-adherent cells under serum-free conditions or to significantly reduce the necessary amount of serum in cell culture.

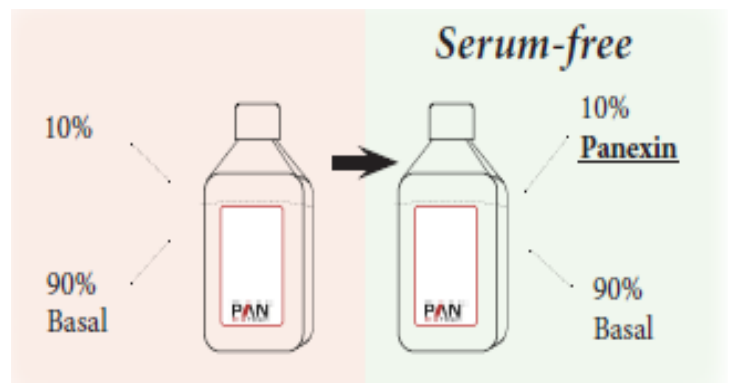
For more demanding cell lines we also designed Panexin NTA (for adherent cells), NTS (for non-adherent cells) and Panexin Pharma Grade (animal component free).

### **Your benefits using Panexin:**

- same handling as FBS, simply replace it with Panexin
- no extensive batch testing necessary
- high reproducibility
- simplified downstream process
- low risk of contamination
- attractive prices

### **Easy to use:**

- Panexin basic can be stored and used in the same manner as serum
- The performance can be further improved by optimizing the concentration of Panexin or modifying/changing the basal medium
- **IMPORTANT:** If Trypsin is used to detach adherent cells it needs to be deactivated with Trypsin inhibitor (1ml Inhibitor per 1ml Trypsin). Accutase does not need to be inhibited.



Contact us if you would like to receive the complete product flyer, protocol of use or a free sample for testing.



**TRY**

## Ni-NTA Agarose Beads for His-Purification from Agarose Beads Technologies



Bulk resins: Nickel NTA Agarose Resin is the most common IMAC resin for working in reducing conditions because of the four metal-binding sites on the chelate, which enables high-protein binding and minimal metal leaching.

1. One step purification
2. High capacity
3. Purification under native or denaturing conditions
4. Minimum metal leaching

### Nickel NTA Agarose Cartridges 5ml

Can be used with an automated chromatography system, a peristaltic pump or with a syringe for manual processing.

This cartridges (5ml) can be operated with liquid chromatography systems via standard 10-32 fittings without additional connectors.

The recommended flow rate is 5ml/min.

### Ni-NTA Magnetic Agarose Beads (5%)

- Purify proteins using native or denaturing conditions
- Easy and fast protocol
- Ideal purification from dilute solutions, pulldown experiments (IP) and the study of biomolecular interactions (ChIP)



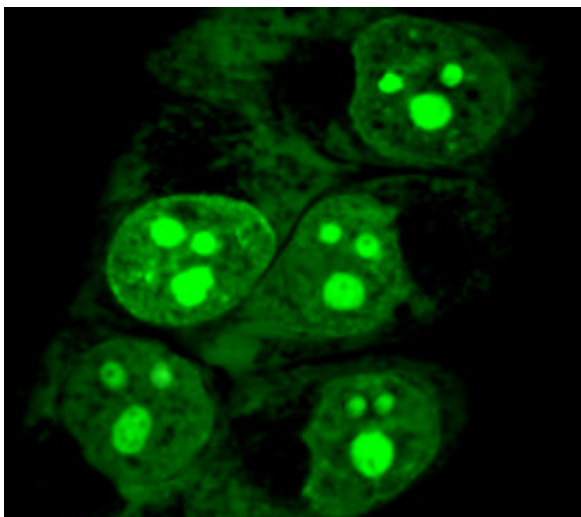
Complete flyer, procedure of use or free samples are available, please ask us.



**SPECIAL OFFER: Up to 30% discount on Nickel NTA Agarose Resins & Cartridges!**

Product Description	Cat-No.	Size	Special Price*
Nickel NTA Agarose Resin	6BCL-NTANi-25	25ml	<b>CHF 230.35</b>
Nickel NTA Agarose Resin	6BCL-NTANi-100	100ml	<b>CHF 689.05</b>
Nickel NTA Agarose Cartridges 5ml	6BCL-NTANiCtg5-5	5 x 5ml	<b>CHF 439.50</b>

\* Prices are net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017



## How safe is your Gel Stain? Don't be misled just because the label says „Safe“

Are you looking for a safer alternative to ethidium bromide for your DNA gels?

A number of dyes are being marketed as safe without extensive lab evidence. But in fact, most of these so-called „safe“ gel stains contain toxic fluorescent dyes that readily enter living cells to bind DNA.

In contrast, Biotium's GelRed™ and GelGreen™ are the only gel stains specifically designed to avoid interacting with genomic DNA by being cell membrane impermeable.

Extensive tests, including those by third party labs, demonstrate that GelRed and GelGreen dyes are non-toxic, non-mutagenic, and non-hazardous for disposal. In addition, they offer higher sensitivity and low background compared to competing gel stains.

### GelRed™ and GelGreen™ Nucleic Acid Gel Stains from Biotium:

- Non-toxic & non-mutagenic
- Non-hazardous for easy disposal
- Ultra-sensitive
- Stable at room temperature
- Use in precast gel or as a post-stain
- Compatible with standard instruments
- Compatible with cloning and sequencing
- GelRed™ replaces EtBr
- GelGreen™ replaces SYBR® Safe, EZ-Vision® RedSafe™, Midori Green, Green-Safe, SafeView™ Classic, and others



Comparison of Nucleic Acids Gel Stains white paper, Safety report or free samples are available, please contact us.

Table 1. Comparison of non-mutagenic ethidium bromide alternatives

Product	Manufacturer	Cat. No.	Dye identity*	Cell permeable?	Dye toxicity*	Sensitivity**
GelRed™	Biotium	41003	GelRed	No	Non-toxic	0.625-12.5 ng
GelGreen™	Biotium	41005	GelGreen	No	Non-toxic	0.625-1.25 ng
EZ-Vision® In-Gel Dye	AMRESCO	N391	DAPI	No	Non-toxic	5 ng
SafeView™ FireRed	Applied Biological Materials	G926	Propidium iodide	No	Toxic to cells with prolonged exposure	0.625-1.25 ng
RedSafe™	iNTRON Biotechnology	21141	Acridine orange	Yes	Toxic to cells, potentiates other mutagens	2.5 ng
SafeView™ Classic	Applied Biological Materials	G108	Acridine orange	Yes	Toxic to cells, potentiates other mutagens	2.5 ng
Midori Green Advance	Nippon Genetics	MG 04	Acridine orange + DAPI	Yes	Toxic to cells, potentiates other mutagens (acridine orange)	2.5 ng
GreenSafe Premium	NZYTech	MB13201	Acridine orange + DAPI	Yes	Toxic to cells, potentiates other mutagens (acridine orange)	2.5 ng
SYBR® Safe	Thermo Fisher Scientific	S33102	Thiazole orange derivative	Yes	Toxic to cells at working concentration	2.5 ng
Nancy-520	Sigma-Aldrich	01494	SYBR® derivative	Yes	No data	1.25 ng

\* For details of chemical analysis and dye toxicity references, download the Comparison of Nucleic Acid Gel Stains: Cell Permeability, Safety, and Sensitivity at [www.biotium.com](http://www.biotium.com).

\*\* Detection of 500 bp dsDNA fragment by gel electrophoresis.

**NEW**

## **Gel-Bright™ LED Gel Illuminator from Biotium**



### **Ideal for use with GelGreen™ & DNAzure™ DNA Gel Stains**

The **Gel-Bright™ LED Gel Illuminator** is a non-UV lightbox for detection of fluorescently labeled nucleic acids and protein. He is optimized for detection of green dyes such as GelGreen™ and PAGE GelGreen™, but is also compatible with red dyes such as **GelRed™**.

The Gel-Bright™ light box is ideal for visualizing and excising DNA bands from a gel, since unlike UV light, the LED lights do not cause any damage to the DNA sample.

The Gel-Bright™ is also safer for the user than a UV light box. When combined with safe and environmentally friendly **GelGreen™**, Gel-Bright™ is ideal for educators and other users that prefer the safest electrophoresis methods possible.

The Gel-Bright™ LED Gel Illuminator is also the best light source for developing the staining of gels stained with the visible blue DNA gel stain DNAzure™.

DNAzure™ is a novel, visible blue DNA gel stain with incredibly high sensitivity. After staining with DNAzure™ the DNA bands first appear colorless, but then become permanently dark blue after a short development with light exposure.



Complete product information is available,  
please ask us.



**SPECIAL OFFER: 20% discount on Gel-Bright!**

<b>Product Description</b>	<b>Cat-No.</b>	<b>Size</b>	<b>Special Price*</b>
Gel-Bright LED Gel Illuminator	E90003	1 each	<b>CHF 748.80</b>

\* Price is net, without any cumulative discount, ex works and excl. V.A.T. Offer valid until 31.07.2017

### **Chemie Brunswick AG**

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