



**A Perfect Union**

**A letter from our president**

Dear valuable partner,

Thank you for your consideration to market our products. In this brochure, A Perfect Union, we provide you with a brief overview of our company, advantages of being our partner, and information on our innovative products. To get information on our latest offering, please visit our website, <http://b2b.mtrscientific.com>. If you have any question, please contact me by phone or email.

Best regards,

*William T. Wong*

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**Inside This Brochure**

Our company ..... 3

Advantages of partnering with MTR Scientific, Inc. .... 4 - 6

Innovative products ..... 7 - 15

ClearBand™ 5X DNA sample loading buffer ..... 8 - 9

EZPURE™ rapid maxi plasmid DNA purification kits ..... 10 - 11

MagicBlue™ rapid protein stain solution ..... 12 - 13

GoldRunner™ 10X rapid electrophoresis buffer for agarose gel  
analysis ..... 14 - 15

Other products ..... 17 - 19

EZPURE™ mini plasmid DNA purification kit ..... 18

EZPURE™ mini filtration column ..... 19

## **Our Company**

Established in 1998, MTR Scientific, Inc., has been providing contract research services for the life science research community. From our contract research services, we developed many improvement over current technologies used in research laboratories. Many of these innovative technologies are unique and are not offered by other companies. As part of our company's expansion, we extend our business into manufacturing research products using innovative technologies that we developed. While we continue to focus our core business in contract research services, we strive to work with our marketing/distribution partners to get our products to life science researchers.

## **Contact Information**

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## **Advantages Of Partnering With MTR Scientific, Inc.**

### 1) Your products/Your labels

The products we manufacture will be packaged with your label, not with our generic label. We will help you design labels according to your specifications. This unique practice ensures your company will receive the brand recognition for the unique, quality products you market.

### 2) Unique products

Products we manufacture contain many improvement over the current technologies used in life science research. Many of these innovative technologies are unique and are not offered by other companies. Therefore, our partner has less worry about similar products sold by competitive companies.

### 3) Consumable products

We focus only on developing and manufacturing consumable products for research. Durable products such as scientific equipments are normally replaced once every few years and offer few selling opportunity. In contract, once customers have adapted our consumable products into their research, they will buy frequently. Consumable products require lower cost and effort in marketing and provide higher volume in sale.

### 4) User-tested products

Products we manufacture are subjected to a testing process by independent researchers and their comments are incorporated in the product development. This testing process helps us to minimize any potential problem that we cannot foresee from our internal development process.

### 5) Marketing support

We provide marketing training as well as product feedback we collect to your sale staff to maximize the marketing potential of each product we manufacture.

### 6) Customer support

We will provide common Q & A on each product to your sale staff. New Q & A will be updated and sent periodically as more information are collected from our customers. For specific questions from your customers, we will provide answers by email to your sale staff, or to your customers directly under arrangement with your company.

### 7) Packaging options

Products we manufacture can be shipped to your company in bulk with or without labels if your company prefers to do packaging in-house, or with complete packaging (with additional charge). Its your choice.

### 8) Direct shipping option

No warehouse or short of staff handling shipping of products to your customers. No problem. We can ship the products (with your labels and packaging) directly to your customers under arrangement with your company.

### 9) Manufacturing pricing

Products we manufacture are sold to your company with manufacture pricing. You determine the retail price of each product based on your company's profit expectation and customer demand. We do provide recommended price for each product for your reference. However, the final retail price of each product is up to you to set.

### 10) Large and small order are equally welcomed.

We understand it is not easy to market a new product. We don't set volume per order or annual quota for our products. However, if you are successful in marketing our products, talk to us about volume discount.

## **Innovative Products**

## ClearBand™ 5X DNA Sample Loading Buffer

### Product highlights

- New generation of DNA sample loading buffer with a unique, small molecular weight tracking dye.
- Tracking dye does not interfere with the visualization of DNA bands on agarose gel.
- Specially developed for applications which involve gel analysis of small DNA fragments around 200 - 500 bp such as PCR products, and small restriction digested fragments.

### Technological advancements

Comparison between traditional DNA sample loading buffer and ClearBand™ DNA sample loading buffer

	Traditional DNA sample buffer	ClearBand™ DNA sample buffer
Contains xylene cyanole and bromophenol blue as tracking dyes	Yes	No
Contains a unique, small molecular weight tracking dye	No	Yes
Visualization problem with DNA fragments around 3 - 4 kb	Yes	No
Visualization problem with DNA fragments around 200 - 500 bp	Yes	No
Ideal for gel analysis of PCR products, and small restriction digested fragments around 200 - 500 bp	No	Yes

### Catalog No.

CB5 ClearBand™ 5X DNA sample loading buffer

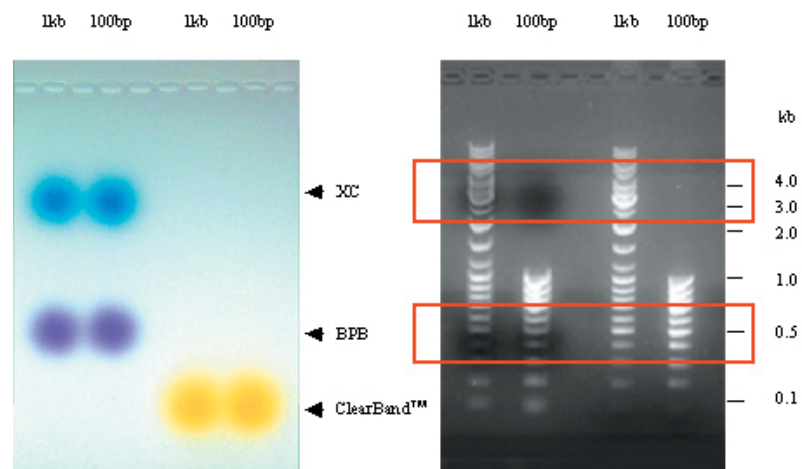
5 x 1 ml

### Product pictures

I.



II.



**Figure:** 1 kb and 100 bp DNA markers were subjected to a 1% agarose gel electrophoresis. Left panel shows gel photographed on top of a regular light box. Right panel shows the same gel photographed on top of a UV box. Samples mixed with DNA sample buffer containing xylene cyanole (XC) and bromophenol blue (BPB) were loaded on the two left lanes. Samples mixed with ClearBand™ DNA sample buffer were loaded on the two right lanes. The migration of the dyes and DNA fragments are indicated.

## EZPURE™ Rapid Maxi Plasmid DNA Purification Kits

### Product highlights

- Membrane-based purification kits.
- Super fast, easy spin procedure.  
High Speed Maxi: 65 min.(50 min with vacuum) without high speed centrifugation requirement  
Standard Maxi: 50 min (35 min with vacuum)
- High purify: sequencing quality plasmid DNA.
- High yield: 30 ug (Mini), 1.2 mg (Maxi) binding capacity per column.
- Safer, environment-friendly formula: NO chaotropic salt, NO guanidine.  
(The ONLY GREEN membrane-based plasmid purification kits on the market)
- No extra step of alcohol precipitation: DNA Is Ready To Be Used after eluted from the column.

### Technological advancements

Comparison between EZPURE™ and Brand Q Maxi plasmid purification kits

	EZPURE™	Brand Q
Membrane-based	Yes	No
Fast, easy, spin protocol	Yes	No
From bacteria to purified DNA	Standard Maxi kit: 65 min (50 min with vacuum) High Speed Maxi kit: 50 min (35 min with vacuum)	150 min.
Binding capacity per column	Up to 1.2 mg	Up to 0.5 mg
High speed centrifugation required	Yes (Standard Maxi kit) No (High Speed Maxi kit)	Yes
Alcohol precipitation required (extra step)	No	Yes
DNA ready to be used after elution	Yes	No
High purity DNA suitable for DNA sequencing	Yes	Yes

### Catalog No.

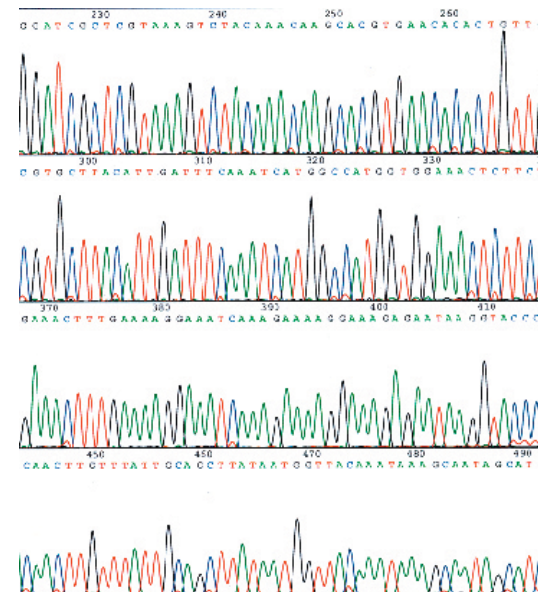
EZPX2	EZPURE™ maxi plasmid DNA purification kit	2 preps
EZPX10	EZPURE™ maxi plasmid DNA purification kit	10 preps
EZPXHS2	EZPURE™ high speed maxi plasmid purification kit	2 preps
EZPXHS10	EZPURE™ high speed maxi plasmid purification kit	10 preps

## Product pictures

### I.



### II.



## MagicBlue™ Rapid Protein Stain Solution

### Product highlights

- One step procedure without destaining requirement for protein visualization.
- Takes 10 minutes to stain a protein gel.
- Detects as little as 10 ng\* of protein in a gel.
- Linear detection between 50 ng and 4 µg of protein.
- Based on a new heat-enhanced, colloidal coomassie blue staining technology.
- Environmentally-safe formula.
- No flammable and hazardous chemicals such as ethanol, methanol, acetic acid, hydrochloric acid, perchloric acid and phosphoric acid.

\* Based on BSA ran on a 12-wells mini polyacrylamide gel. Detection sensitivity varies from protein to protein. Best for proteins 15 k Da and above.

### Technological advancements

Comparison between traditional coomassie blue stain solution and MagicBlue™ rapid protein stain solution

	Traditional coomassie	MagicBlue™
Time to stain a gel	3 – 4 hours	About 10 min.
Steps	Two (staining and destaining)	One (no need for destaining)
Sensitivity	> 100 ng	> 10 ng
Environmentally-safe formula	No	Yes
Contains flammable chemicals	Yes	No
Contains hazardous acid	Yes	No

### Catalog No.

MB100S	MagicBlue™ rapid protein stain solution	100 ml
MB100	MagicBlue™ rapid protein stain solution	1000 ml
MB102	MagicBlue™ starter Kit (Kit contains 1 liter of MagicBlue™ rapid protein stain solution and 1 MagicBlue™ stain tray)	

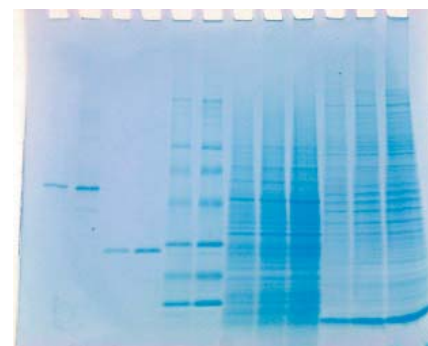
## Product pictures

### I.

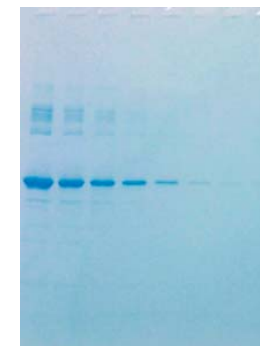


### II.

#### A.



#### B.



**Detection of proteins by MagicBlue™** 4 - 20% Tris-Glycine mini gels were stained with MagicBlue™. Figure A. Lanes 1 and 2 represent 100 and 200 ng of BSA. Lanes 3 - 4 represent 100 and 200 ng of glutathione S-transferase. Lanes 5 and 6 represent 2 and 4 µg of marker proteins of 200, 97, 68, 43, 30, 18 and 14 k Da. Lanes 7 - 9 represent 2.5, 5 and 10 µg of total bacterial lysate. Lanes 10 - 12 represent 2, 4 and 8 µg of total cell lysate from NIH 3T3 cells. Figure B. Lanes 1 - 8 represents 2 µg, 1 µg, 500, 250, 100, 50, 25 and 12.5 ng of BSA.

## GoldRunner™ 10X Rapid Electrophoresis Buffer For Agarose Gel Analysis

### Product highlights

- New generation of agarose gel electrophoresis buffer with an unique formulation for rapid gel analysis.
- Allow gel electrophoresis to be performed at high voltage without significant increase of buffer temperature and current.
- Complete an agarose gel electrophoresis in 1/2 to 1/3 of the time required by the traditional TAE and TBE buffer.
- Accomplish gel analysis in shorter time without sacrificing gel resolution.

### Technological advancements

Comparison between traditional TAE/TBE electrophoresis buffer and GoldRunner™ rapid electrophoresis buffer

	TAE/TBE Buffers	GoldRunner™
Typical time to complete an agarose gel electrophoresis	60 min - 2 hours	30 min - 45 min
Gel electrophoresis can be performed at high voltage	No	Yes
Loss of resolution, gel melting when an agarose gel electrophoresis is performed at high voltage	Yes	No

### Catalog No.

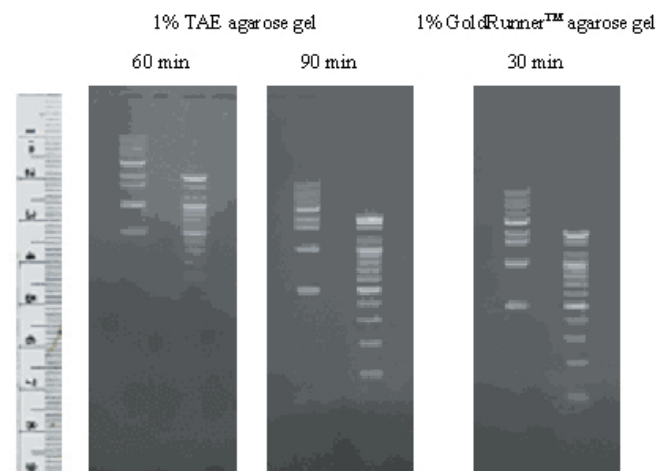
GR100	GoldRunner™ 10X rapid electrophoresis buffer	100 ml
GR1000	GoldRunner™ 10X rapid electrophoresis buffer	1000 ml

### Product pictures

I.



II.



**Figure:** 1 kb DNA marker and 100 bp DNA marker were run on a 1% mini agarose gel prepared in TAE buffer (two gels on left), or GoldRunner™ rapid electrophoresis buffer (right). The TAE gel was performed at constant 80 volts and the GoldRunner™ gel was performed at constant 250 volts for the time indicated. The bands in the 1 kb marker lane are 10.2, 8, 6, 5, 4, 3, 2, 1.6, 1 and 0.5 kb. The bands in the 100 bp marker lane are 2000, 1600, 1200, 1000, 900, 800, 700, 600, 500, 400, 300, 200 and 100 bp.

**Other Products**

## EZPURE™ Mini Plasmid DNA Purification Kit

### Product highlights

- Membrane-based purification kit.
- Super fast, easy spin procedure.
- Purification protocol similar to Qiagen's mini prep purification procedures
- High purify: sequencing quality plasmid DNA.
- High yield: 30 ug binding capacity per columnn.
- Safer, environment-friendly formula: NO chaotropic salt, NO guanidine.  
(The ONLY GREEN membrane-based plasmid purification kits on the maket)
- No extra step of alcohol precipitation: DNA Is Ready To Be Used after eluted from the columnn.
- High quality, cost effective alterative for large scale plasmid purification

Comparison between EZPURE™ and Brand Q mini plasmid purification kits

	EZPURE™	Brand Q
Membrane-based	Yes	Yes
Fast, easy, spin protocol	Yes	Yes
Binding capacity per columnn	30 ug	20 ug
Safer, environment-friendly formula	Yes	No
High purity DNA suitable for DNA sequencing	Yes	Yes*
Cost effective alterative for large scale purification	Yes	No

\* Modification of the standard protocol required.

### Product picture



### Catalog No.

EZPN10 EZPURE™ mini plasmid DNA purification kit 10 preps  
 EZPN50 EZPURE™ mini plasmid DNA purification kit 50 preps

## EZPURE™ Mini Filtration Column

### Product highlights

- 0.45 micron, low protein, low DNA binding membrane-based columnn.
- Used for micro centrifugation-based filtration applications.
- For clarify DNA, protein samples.
- Used with the combination of size exclusion resin such as Sephadex G25, G50, or G100 for desalting, removal of nucleotides and small molecules from DNA and proteins samples.

### Product picture



### Catalog No.

EZPNF10 EZPURE™ mini filtration columns 10 columns  
 EZPNF50 EZPURE™ mini filtration columns 50 columns