

# BIO Scientific pty. ltd.

## Newsletter FEBRUARY 2018

BioScientific aims to keep our researchers and customers updated with news from our various suppliers with our Newsletter – We are constantly sourcing top quality products for your research. Contact our office for the “HARD TO FIND” product! [info@biosci.com.au](mailto:info@biosci.com.au) for all enquiries



Interactive Assay Solutions™



Most Convenient PGE<sub>2</sub> Kit Available

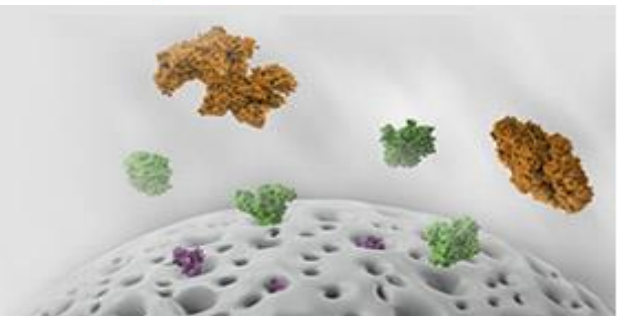
Measures All PGE<sub>2</sub> Concentrations in Any Sample – K015-H1

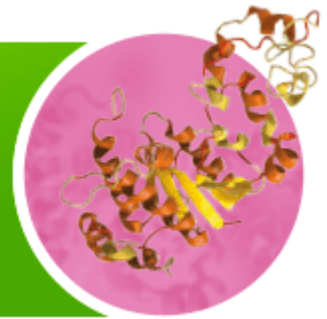
Enquiries – [info@biosci.com.au](mailto:info@biosci.com.au)

## Elabsience®

### Chromatographic Media

- Gel filtration chromatography
- Hydrophobic interaction chromatography
- Affinity chromatography
- Ion exchange chromatography





# Affinity Chromatography

## Catch and Release of Diols with Boronic Acid Agarose

Boronic acids bind diol compounds with high selectivity.<sup>[1]</sup> Since many biomolecules are **diol-decorated sugar derivatives**, **immobilized boronic acids** permit the single step enrichment of

- Carbohydrates<sup>[2]</sup>
- Nucleotides<sup>[3]</sup>
- Cofactors<sup>[4]</sup>
- Entire **Glycoproteins**<sup>[5]</sup> and **RNAs**<sup>[6,7]</sup>

To this end, **agarose resins** stand out for their large exclusion limit ( $1 \times 10^4 - 4 \times 10^5$  Da) and are therefore particularly well suited for the complexation of **large biomolecules**.<sup>[8,9]</sup> Capitalizing on the **reversibility** of boronate ester formation, captured compounds can be **easily retrieved under mild conditions** for further applications or analysis.



## Human DNA - Pure and Simple

Human placental genomic DNA is uniquely suited to many different uses in molecular biology. It can be used in applications where nucleic acid blocking is required such as Southern hybridisation, specialised cytogenetic assays, fluorescence in situ hybridisation (FISH), Northern hybridisation etc.

Cambio's human placental genomic DNA is total genomic DNA and will specifically block human random repeat sequences making it an ideal blocker for hybridisation experiments.

Our DNA is supplied as convenient small pack sizes (milligrams) but we also supply in bulk (gram quantities) as required.

### Applications:

Blocking agent for a wide range of different DNA- or RNA-based applications, including but not limited to:

- \* Southern hybridization
- \* Northern hybridization
- \* Applications employing nucleic acid probes
  - \* Nucleic acid binding assays
  - \* Fluorescence in-situ Hybridisation (FISH)
    - \* Cytogenetic assays
    - \* PCR standards
  - \* As internal Controls

## *Endothelial Cells and The Circulatory System*

Vascular endothelial cells are multi-functional cells that line the vessels of the circulatory system. Endothelial cell monolayers form the innermost layer of vessels, serving protective and barrier functions, and interacting with factors in the blood to mediate wound healing and the inflammatory response. In particular, microvascular endothelial cells are located in the smallest vessels of the circulatory system, such as the capillaries. Vascular endothelial cells have an important role in vessel homeostasis and endothelial cell dysfunction can result in multiple diseases, including atherosclerosis. In addition, the endothelium is the last barrier for metastatic tumor cells to cross before seeding a new tumor in a secondary organ site, an obstacle that is investigated in one study – Further reading :


[https://www.lifelinecelltech.com/microvascular-endothelial-cells-circulatory-system-research/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=01082018](https://www.lifelinecelltech.com/microvascular-endothelial-cells-circulatory-system-research/?utm_source=newsletter&utm_medium=email&utm_campaign=01082018)




For all pricing – [info@biosci.com.au](mailto:info@biosci.com.au)



## *Proteomics*

 Proteomics is the study of the structure of proteins and their particular function. Proteins are a vital piece of the puzzle in living organisms, as they are the main components of the physiological metabolic pathways of cells. The proteome is the entire complement of proteins, including the modifications made to a particular set of proteins, produced by an organism or system. This will vary with time and distinct requirements, or stresses, that a cell or organism undergoes.

 Genlantis was the first company to offer a commercially available [BioPORTER Protein Delivery Reagent](#). This reagent delivers functional protein into the cell for protein function studies. With SoluBL21, a optimized E. coli strain for expressing insoluble proteins in soluble form, as well as cell lysis, and extraction methods, you have powerful tools for proteomic research.

Details on website [www.genlantis.com](http://www.genlantis.com)

## Small Ear Puncher

Our own development of a small and efficient ear puncher based on the AT7000. This puncher allows the user to come closer when marking the animal and it is also equipped with a sloped edge for a clean cut. This ear puncher with spring action is autoclavable, but should be lubricated afterwards for a long and trouble free usage. 11 cm long with a Ø 2 mm hole.

## Ear Puncher

We developed this ear punch pincer after having heard several testimonies from customers with sore wrists and thumbs from using small ID punchers. This pincer relieves the stress on the wrist during ID marking as it requires a very gentle pressure to cut a hole. The stainless steel puncher has a sloped edge which provides a cut rather than a punch, which minimizes animal discomfort. The ear punch pincer is autoclavable but should be lubricated afterwards for a long and trouble free usage.

## Ear Tags

These ear tags are produced in Monel which is a Nickel-Copper alloy that is used for its excellent combination of corrosion resistance, strength & flexibility. The tags are lightweight and can be used in chronic studies. The standard tags are laser etched for best visibility with number 1–1000. The ear tags are also available with custom etched numbers or letters. The tag is easily applied with a special applicator.

Custom numbering are available upon request e.g. A1001-A2000, B2001-B3000 etc.

Enquiries: [sales@biosci.com.au](mailto:sales@biosci.com.au)

**FOR A COMPREHENSIVE LISTING OF PRODUCTS AVAILABLE AT AGNTHOS, PLEASE VISIT**  
<https://www.agnthos.se/index.php>



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### **2. By Email:**

Email our Sales Department at [sales@biosci.com.au](mailto:sales@biosci.com.au) After your order is entered, an order confirmation will be sent via email.



### **3. By Phone:**

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Fax your Purchase Order to 02 9524 3100. After your order is entered, an order confirmation will be sent by return fax.

**ALL Enquiries** [info@biosci.com.au](mailto:info@biosci.com.au)