BIO Scientific pty. ltd.

Newsletter OCTOBER 2017

BioScientific aims to keep our researchers and customers updated with news from our various suppliers with our Newsletter –
For pricing on any products featured in this newsletter - email:
sales@biosci.com.au

Beginning OCTOBER 1 – OCTOBER 31, 2017

10% DISCOUNT! From ARBOR ASSAYS®

Retinol Binding Protein (RBP) Multi-Format EIA Kit
K062-H1 AND K062-H5

•QUICK - Results in 90 Minutes •Convenient - One kit for the measurement of a broad range of RBP concentrations MULTI SAMPLE TYPES •SAMPLE - Serum, Plasma, Urine, Dried Blood Spots •SAMPLES/KIT - 38 or 230 in Duplicate •Stable 4˚C Liquid Reagents For further reading: http://www.arborassays.com/product/retinol-binding-protein-rbp-multi-format-eia-kit/	The DetectX® Retinol Binding Protein (RBP) Multi-Format EIA Kit is designed to allow for the measurement of both high and low RBP levels in a variety of samples including dried blood spots, serum, EDTA and heparin plasma and urine with the same kit. The kit uses native human RBP as a standard. Standards or diluted samples are added to a coated microtiter plate along with a RBP-peroxidase conjugate and the binding reaction initiated by addition of a RBP-specific sheep antibody. After a 60-minute incubation, the plate is washed and TMB substrate solution added. After 30 minutes, the color development is stopped and the intensity of the generated signal is read at 450nm.

NVIGEN
Nano Vision • Life Science

MagVigen™ Plasma DNA Capture Kit Cat# K61003

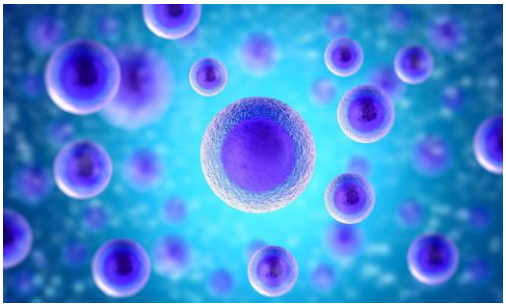
MagVigen™ Plasma DNA Capture kit (Cat# K61003) is specially designed to capture cell free DNA from Plasma or Serum with no need of column or centrifugation. MagVigen™ allows simple and efficient DNA extraction ideal for automation. The left figure shows DNA extraction results of 50 ng DNA (82 bp) spiked into 600 µl of plasma, using two different batches of beads and for multiple extraction experiments. Aliquots of DNA elution were used for amplification. An average yield of 50% could be achieved for 82bp DNA.

RayBiotech
Empowering your proteomics

ISO Certified

ELISA | Antibody Arrays | Services | Proteins | Antibodies

Stem Cell Signatures



Stem cells are uni-, multi- or pluripotent eukaryotic cell types which give rise to most of the basic structures and tissues of a multicellular organism during development, as well as directing tissue renewal late into adulthood. Stem cell potency is marked by unique signatures of proteins manufactured by these cells, which can serve as valuable tools for both cell-type identification and the discovery of new stem cell-based signaling cascades driving cell signaling, commitment and differentiation. These protein signatures may be rapidly and comprehensively characterized by the application of antibody arrays.

Human Stem Cell Array

Simultaneous detection of multiple stem cell markers undoubtedly provides a powerful tool to study the differentiation mechanism of human stem cells and to develop disease treatments.

POS1	POS2	POS3	NEG	Alpha-fetoprotein	OCT-4	BMPR-IA	ALK-6
Brachyury	CD38	E-Cadherin	GATA4	hCG beta	Nanog	Nestin	PDX-1
SOX2	SOX17	VEGFR2	NEG	NEG	NEG	NEG	POS2

RayBio® Human Stem Cell Array Kit is a rapid, sensitive, and economical tool featuring 15 classical transcription factors, cell surface markers and other key molecules in embryonic cell differentiation. Each antibody was carefully tested using the purified target protein.

Glass Slide (AAH-SC-G1)

Membrane (AAH-SC-1)

Stem Cell-Related Assay Kits

ELISA Kits:

SMAD ELISA kits

HDAC ELISA kits

Post-Translational Modification kits

Sandwich Based Arrays:

Human Apotosis Signaling Array (AAH-APOSIG-1)

Mouse Growth Factor Arrays

Rat Growth Factor Array (AAR-GF-1)

Visit www.biosci.com.au for pricing and technical enquiries

Lifeline® Prostate Epithelial Cells Used to Help Isolate Prostate Cancer Stem Cells

Identification of Prostate Stem Cells using Lifeline® Prostate Epithelial Cells - Many tissues in the body retain adult stem cells that are responsible for maintaining tissue homeostasis and tissue renewal. The stem cell population is typically composed of rare cells that can be identified based on two primary characteristics: self-renewal, and the capacity to give rise to all the differentiated cell types of the tissue in which they reside. Adult stem cell populations are notoriously difficult to identify in vivo and are often defined by unique cell surface markers. In animal models, or in vitro, stem cells can also be identified using lineage tracing or lineage labeling techniques. The identity of prostate epithelial stem cells is debated, and while some cell surface markers have been identified, the results are inconsistent. In a new study from this year, ***Hu et al.*** set out to identify prostate stem cells using BrdU labeling of prostaspheres derived from Lifeline® human prostate epithelial cells grown in ProstaLife™ medium Cat# LL-0041

Related products - LS-1097 LS-1072 LM-0017

Following a 10-day BrdU labeling period and a 5-day washout, the authors found that BrdU-labeled single cells were present, and could also be labeled with the CFSE pro-dye and sorted using FACS analysis. These labeled single cells exhibited stem cell properties, including the ability to generate prostaspheres, as well as prostate-like tissue grafts in vivo. In contrast, cells lowly expressing CFSE could not form spheres or tissue grafts. Importantly, using a paired-cell assay (two neighboring cells derived from one cell division), the authors demonstrated that the putative BrdU-labeled prostate stem cells most often underwent asymmetric cell division, in which cell division yields one daughter stem cell and one more committed progenitor daughter cell that has less BrdU label.

Enquiries – sales@biosci.com.au

Further reading: https://www.lifelinecelltech.com/lifeline-prostate-epithelial-cells-used-to-help-isolate-prostate-cancer-stem-cells/

Ni-NTA-Nanogold®: A Versatile Reagent with Many Applications

Are you familiar with the NANOPROBES immunogold products and their uses for microscopy??
Do you know about the advantages and other uses of the family of products for targeting His-tagged proteins?

Ni-NTA-Nanogold® and GoldiBlot™?

Nanoprobes is offering a new special discount from Oct. 15th, 2017 through Dec.31st, 2017 – 20% off the following products

2080	**1.8 nm Ni-NTA-Nanogold®**	**2082**	**5 nm Ni-NTA-Nanogold®**
2084	**10 nm Ni-NTA-Nanogold® NEW**	**2090**	**GoldiBlot™ His-Detect Western Blot Kit**

Enquire now for your special pricing!!
sales@biosci.com.au

Cedarlane Laboratories also offer -

CELLutions BIOSYSTEMS INC.

Innovative Biological Tools for Basic Science, Drug Discovery & Therapeutic Development

Cell lines have an innate value when used to investigate the pathophysiology and to screen for potential therapeutic targets of a variety of diseases and disorders in biological systems. CELLutions is currently marketing several novel cell line platforms which have diverse utility in a variety of academic and commercial research programs. Please let us know if you have additional cell lines you are interested in commercializing or are looking for a specific cell line to serve your research needs. CELLutions goal is to provide novel and useful research products to provide a profound impact on a variety of research programs. Currently, CELLutions has developed a core competency in the commercialization of cell lines, enzymes, and molecular biology reagents.

Please visit our Website for a more comprehensive listing of products available

www.biosci.com.au

BIOScientific pty. ltd.
Service to Science since '72
1300 BIOSCI www.biosci.com.au