August 2012

ATCC | THE ESSENTIALS OF LIFE SCIENCE RESEARCH GLOBALLY DELIVERED™

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In this issue:

Excellence in Culture Webinar Series

ATCC is excited to announce a new webinar series. Each webinar will feature a highly experienced ATCC scientist who will focus on our innovative products, and demonstrate how you can best utilize ATCC products and services to advance your research. The series will begin on August 23rd, 2012 at 1:00 PM (EST), and run every other Thursday at 1:00 PM (EST) until November 29th. Webinars will be broadcast live, run 30 to 45 minutes, and be followed by a 10-minute Q&A.

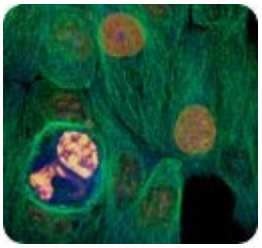
Coming up in September!

Stem Cell Solutions

Presented by: Yukari Tokuyama
Scientist, Product Development
ATCC Cell Systems
Thursday, September 20th - 1:00 PM (EST)

This webinar will introduce ATCC's stem cell products, which include human induced pluripotent stem cells (iPSCs), human mesenchymal stem cells (MSCs) and mouse ESCs. The focus will be on hurdles currently facing human iPSC culture systems and introduce ATCC® Complete Stem Cell Solutions™, which provide researchers with reliable, authenticated cells and optimized media and reagents in a single, easy to use system.

Register now ▸



ATCC® Breast Cancer Biomarkers Panel – *Now Available!*

ATCC Tumor Cell Panels harness the combined forces of genomic data and highly reliable, authenticated ATCC tumor cell lines. The ATCC® Breast Cancer Biomarkers Cell Line Panel (ATCC® TCP-1004™) takes the Tumor Cell Panel concept to the next level by including published biomarker data for each culture in a convenient, printable format. This panel puts biomarker information at researchers' fingertips, so they can reach a deeper understanding of the mechanisms behind the development and progression of breast cancer.

Share with others:

Events and Conferences

Discovery on Target

Boston, MA
October 1-3
Booth #: 23

Learn more ▸

PlanetConnect Bristol Meyers Squibb Scientific Symposium

Princeton, NJ
October 29-30
Booth #: 27

Learn more ▸

Webinar

Tomorrow!

Use of ATCC® Tumor Cell Panels in Drug Discovery

Dr. Fang Tian
Senior Scientist, Cell Biology
ATCC
August 23, 2012
1:00 PM (EST)

Register now ▸

ATCC Publications

ATCC® hTERT Guide – *Download Today!*

A manual featuring tips and techniques for culturing hTERT immortalized cells.

Download PDF ▸

ATCC® Stem Cell Culture Guide – *Download Today!*

A manual featuring tips and techniques for culturing stem cells.

Download PDF ▸

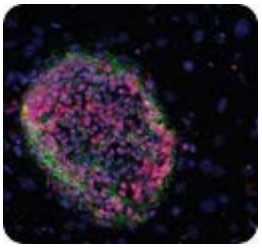
Blog: Cell Culture Conversation

Check out the Cell Culture Conversation Blog for tips and advice on how to get the best results from your cell cultures.

Engage now ▸

The ATCC® Breast Cancer Biomarkers Cell Line Panel is composed of 7 early-passage tumor cell lines deposited by the University of Arizona Cancer Center. The tumor cell lines in this panel are isolated from a variety of primary and metastatic sites, and annotated with pre-operative chemotherapy treatments, as well as published positive and negative biomarkers. The ATCC® Breast Cancer Biomarkers Cell Line Panel is a valuable tool you can use to design powerful experiments and accelerate your cancer research.

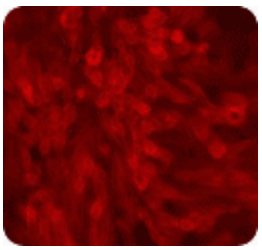
Learn more ▸



Parkinson's Disease human iPSCs – *Now Available!*

The newest addition to the ATCC collection of human induced pluripotent stem cells (hiPSCs) is ATCC® ACS-1013™ (DYS0530). These cells were reprogrammed from the primary dermal fibroblasts of a Parkinson's disease patient, using the Sendai virus to express OCT4, SOC2, KLF4 and MYC genes. The ATCC collection also includes hiPSCs from the same patient reprogrammed using either retroviral, ATCC® ACS-1012™ (DYR0530), or episomal, ATCC® ACS-1014™ (DYP0530), expression of the OCT4, SOX2, KLF4 and MYC genes. Together, these cell lines form a versatile tool-kit that will allow researchers to study not only the etiology of Parkinson's disease, but also the cellular and genetic effects of different reprogramming methods.

Learn more ▸



Literature Spotlight: hTERT-immortalized Renal Proximal Tubular Epithelial Cells

A recently published paper in the American Journal of Physiology - Renal Physiology uses hTERT-immortalized renal proximal tubular epithelial cells (RPTEC/TERT1, ATCC® CRL-4031™) to unravel how specific carcinogens act on normal renal cells. The authors of the study asked if renal carcinogens acted by disrupting primary cilia, which can lead to re-entry into the cell cycle and malignancy. To test this hypothesis the authors treated RPTEC/TERT1 cells that had reached confluence and differentiated (i.e., stopped dividing and developed a primary cilium) with various known carcinogens and looked for a reduction in the number of primary cilia. They then performed microarray analysis on the different treatment groups to look for similarities and differences in how individual carcinogens affected gene expression. They show that while some renal carcinogens induce loss of the primary cilium, others do not, and these results were mirrored by the microarray data. Additionally, they found that the effect on the primary cilium is independent of cell cycle re-entry. This study illustrates how renal cancer may arise through multiple mechanisms and that RPTEC/TERT1 cells will help investigators understand how renal cancer develops and aid in devising strategies for its prevention and treatment.

Learn more ▸

Radford, R. et al. Carcinogens induce loss of the primary cilium in human renal proximal tubular epithelial cells independently of effects on the cell cycle. Am J Physiol Renal Physiol 302, F905-16.

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