



## Q&A ATCC® Excellence in Research Webinar “Genetic Alteration Cell Panels: Effective Tools for High Throughput In Vitro Screening”

### General Questions

1. Will we be able to download the presentation?  
This presentation will be available to watch on demand on the ATCC website, or [click here](#).
2. Is the sequence data in the [ATCC® Genetic Alteration Panels](#) generated in-house, or is it acquired from public databases and research articles?  
For each of the [ATCC® Genetic Alteration Panels](#), all of the genomic data was obtained in-house at ATCC. This information is available on our website within the [ATCC® Genetic Alteration brochure](#).
3. Do you have other phenotypic characterization data for the [ATCC® Genetic Alteration Panels](#) in addition to validated gene mutations?  
In addition to validating the gene copy number variations and mutations within cell lines, ATCC also tests the related gene expression by real-time PCR and related protein expression by Western blot. In addition, we have characterized the cell growth kinetics, cell morphology, the related protein expression level, and protein cellular location by immunofluorescence staining. This characterization information and data can be found in the [ATCC® Genetic Alteration Panel brochure](#) on our website.
4. Do you have purified genomic DNA for the cell lines represented in the [ATCC® Genetic Alteration Panels](#)?  
ATCC is currently producing genomic DNA for most of the cell lines represented in the 10 Genetic Alteration Panels. We will start to release these products in October 2014. These purified genomic DNA preparations are ideal as control materials for molecular diagnostics, as well as for general research purposes.
5. What other types of targets has Corning® Epic® Technology been used for in cell-based assays?  
Epic has been used successfully for a wide range of targets in cell-based assays. There are now a number of publications demonstrating successful application of Epic for G protein-coupled receptors (GPCRs), where DMR profiles across many different cell backgrounds are highly characteristic of the downstream signaling pathway. In addition to GPCRs and receptor tyrosine kinases (this study), other targets that have been tested successfully on Epic include, ion channels, toll-like receptors, and the Wnt signaling pathway. Finally, longer term assay formats such as cytotoxicity, viral infection and cellular differentiation

assays are all feasible using Epic.

6. Is it possible to test the effects of drugs like the EGFR inhibitors in primary cells?

The optical biosensor technology used in Epic is sensitive enough to detect endogenously-mediated responses in all cell types including primary and stem cells. This extends also to suspension cells such as primary blood cells, which can be used to evaluate the effects of chemotherapeutic drugs on leukemic cells obtained directly from patients.

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