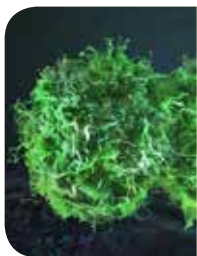




Cancer Resources

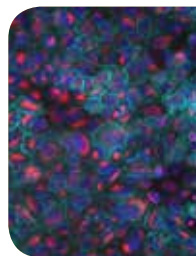
ATCC has been supporting cancer research for over 50 years. We currently provide over 4,000 fully characterized cell lines and novel cell-based models to support the global cancer research community in understanding how cancer manifests itself and discovering effective treatment options. ATCC Cancer Resources include:



CRISPR/Cas9-Gene Edited Isogenic Cell Lines

- EML4-ALK Fusion A549 Isogenic Cell Line
- NRAS Mutant A375 Isogenic Cell Line
- KRAS Mutant A375 Isogenic Cell Line
- IDH1 Mutant Isogenic Cell Line
- IDH2 Mutant Isogenic Cell Line

www.atcc.org/isogenic



Epithelial-mesenchymal Transition (EMT) Reporter Cell Line

- CRISPR/Cas9 gene-edited
- Vimentin-RFP fusion protein
- Strong RFP signal upon EMT induction
- Sensitive to EMT inhibitors

www.atcc.org/EMT



Tumor Cell Panels

- Tumor Panels by Genetic Alteration
- Tumor Panels by Tissue Type
- p53 Hotspot Mutation Cell Panels

www.atcc.org/tcp



Angiogenesis Resources

- Angio-Ready™ Angiogenesis Assay System
- Primary Endothelial and Smooth Muscle Cells
- Cardiovascular Cell Lines
- CellMatrix Basement Membrane Gel

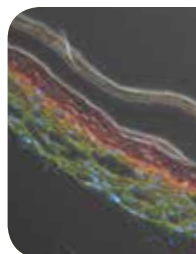
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Cell Health & Viability

- MTT and XTT Assays
- Reliablue™ Cell Viability Assay
- Mycoplasma Detection Kit
- CoolCell® LX Alcohol-free Cryopreservation Container

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Complete Primary Cell Solutions

- Human Airway, Renal, Epidermal, Mammary, and More
- Complete Growth Media and Supplements
- hTERT-immortalized Primary Cells

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Cell Line Genomic DNA

- Quantitative DNA
- Highly Purified DNA
- Certified Reference Material DNA

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Custom Solutions

- Custom Services
- Custom Cell Production and Manufacturing
- Cell Line Development
- Cell Line Authentication
- Biorepository ServicesSM

www.atcc.org/services

Angio-Ready™, a tool for high-throughput angiogenesis studies

Angio-Ready™ was engineered at ATCC to provide researchers with an assay-ready kit to measure the growth of new blood vessels¹.

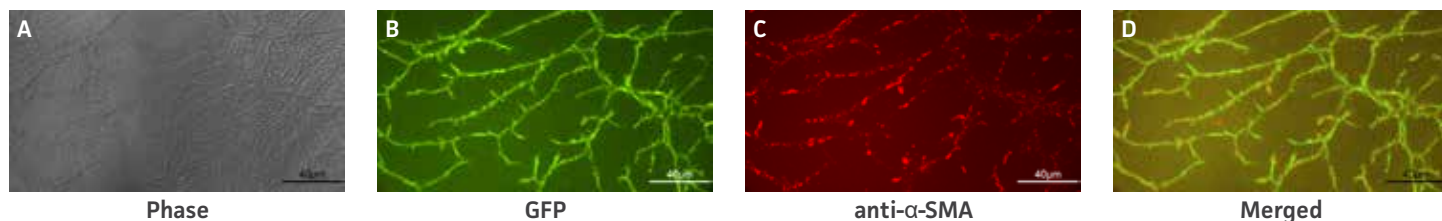


FIGURE 1. Establishment of TeloHAEC-GFP and hTERT-MSC co-culture angiogenesis. TeloHAEC-GFPs co-cultured with hTERT-MSCs for 7 days in the optimized angiogenesis medium displayed A) 3D tubule structures and B) a long branching organization C) that exhibited immuno-reactivity to an α -SMA antibody, which D) co-localized with the TeloHAEC-GFP.

Isogenic cell lines

Clinically relevant cell models are critical for studies of molecular and cellular mechanisms of tumors, as well as for drug screening for cancer. With genome editing tools such as CRISPR/Cas9, ATCC has created isogenic cell lines with mutants of key oncogenes, such as EML4-ALK fusion and NRAS mutation. These cell lines are ideal for identifying novel, personalized treatment regimens².

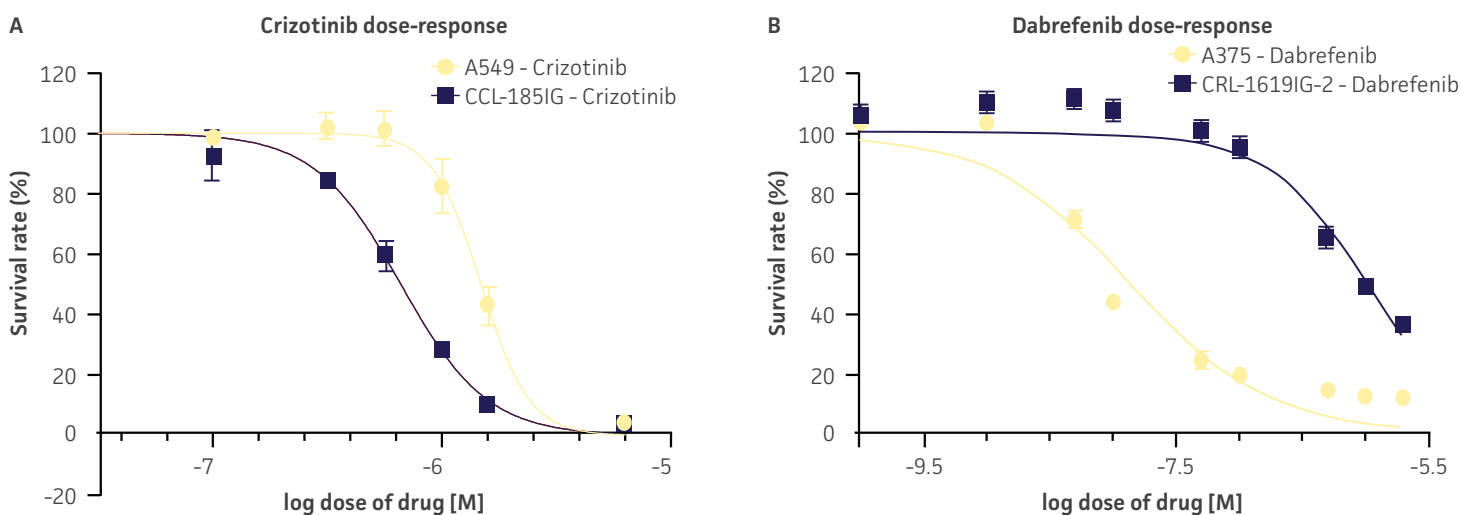


FIGURE 2. (A) EML4-ALK Fusion-A549 Isogenic Cell Line (ATCC® CCL-185IG™) is sensitive to ALK signaling pathway inhibition. A549 (ATCC® CCL-185™) and CCL-185IG cells were treated with the indicated concentrations of ALK inhibitor crizotinib and cell survival was determined via live cell analysis. (B) NRAS Q61K Mutant A375 Isogenic Cell Line (ATCC® CRL-1619IG-2™) is resistant to BRAF signaling pathway inhibition. A375 (ATCC® CRL-1619™) and CRL-1619IG-2 cells were treated with the indicated concentrations of BRAF inhibitor dabrafenib and cell survival was determined as in A).

References

1. Zou C, Shapiro BS. *In vitro* Angiogenesis Assay Using the ATCC® Angio-Ready™ System. Application Note Number 19, 2016.
2. Enameh, MS, et al. The generation of an EML4-ALK fusion NSCLC isogenic cell line relevant for drug discovery and development. Application Note Number 25, 2016.