

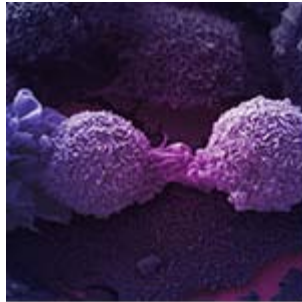
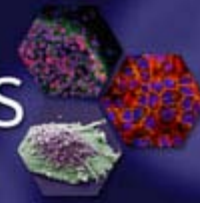


January 2016

Share:



# cell passages

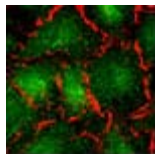


## EML4-ALK Isogenic Cells — **New!**

ATCC is proud to announce its first product developed using CRISPR/Cas9 technology, the EML4-ALK Fusion-A549 Isogenic Cell Line Human ([ATCC® CCL-185IG™](#)). This cell line was derived from the parental A549

([ATCC® CCL-185™](#)) non-small cell lung cancer cell line. EML4-ALK Fusion-A549 Isogenic Cell Line has been intensively validated on the genome, transcript, and protein level, and is otherwise identical to the parental line. This isogenic cell line is more sensitive to ALK inhibitor crizotinib when compared to A549, and serves as a vital model to study cell signaling pathways in cancer as well as in drug screening when used side-by-side with A549 cells.

Further your lung cancer research with the EML4-ALK Fusion-A549 Isogenic Cell Line Human [ATCC® CCL-185IG™](#) derived from A549 [ATCC® CCL-185™](#) today!



## Lung Cancer

Lung cancers are classified by type: small cell lung

carcinoma (SCLC) and non-small cell lung carcinoma (NSCLC). SCLCs are associated with smoking and metastasize very early. By contrast, non-smokers usually present with NSCLC, which are further subdivided into squamous cell carcinomas, adenocarcinomas, and large cell carcinomas. Since both SCLC and



## Physiologically Relevant Controls

All experiments should include physiologically relevant controls. ATCC provides both primary and hTERT-immortalized bronchial epithelial cells and small airway cells that may be used side-by-side with NSCLC or SCLC cells as normal controls. The primary and

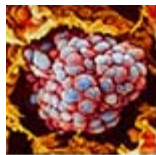
NSCLC are usually diagnosed after the disease has spread beyond the primary site, the overall survival rates for lung cancers are poor. To breathe new life into your lung cancer research, ATCC provides numerous lung cancer cell lines, a new gene-edited isogenic NSCLC cell line, human primary cells, and h-TERT-immortalized cell lines. And to increase the throughput of your lung cancer experiments, ATCC has lung cancer cell lines organized into tumor cell panels.

[Find](#) out more about ATCC Lung Cancer Resources.

hTERT-immortalized cells may also be used to create 3D cell culture models to better represent an *in vivo* environment, *ex vivo*.

Browse the ATCC [Primary Cells](#) and [hTERT Immortalized Cells](#) to find physiological models relevant for your research needs.

Add new dimension to your research, read our application note [Human Bronchial/Tracheal Epithelial Cells: Improving Functional Studies](#) to find out how primary bronchial epithelial cells differentiate into mature airway tissue using an 3-D Air-Liquid Culture Interface model.



## Lung Cancer Tumor Cell Panels

The ATCC Lung Tumor Cell Panel combines authenticated, well-characterized cell lines with mutation data from the Sanger Institute Catalogue of Somatic Mutations in Cancer (COSMIC) to create powerful tools for cancer research and drug discovery. Each Tumor Cell Panel contains at least six lung cancer cell lines with varying degrees of genetic complexity, including mutations in EGFR, RAS, PIK3R1, and TP53. These panels can be used to enhance the biological understanding of genetic alterations across tumor types, for the validation and characterization of potential cancer driver genes, and for testing small molecules or biologics for cancer drug development.

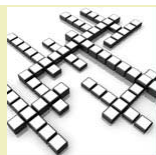
[Order](#) your ATCC Lung Tumor Cell Panels today!



## ATCC Video Contest

Celebrate with ATCC its 90 years of supporting the global scientific research community by entering the 2015 Video Contest. Submit a video up to three minutes in length demonstrating how ATCC's microbiology and cell biology products and/or services have been leveraged in your innovative and scientific research for a chance to win the \$1,500.00 grand prize or \$1,000.00 first place prize, or an ATCC product credit in lieu of these prizes\*.

[Enter today!](#) All videos must be submitted by 11:59 PM ET on February 10, 2016.



## ATCC Puzzle

Lung Location

Try this [month's crossword puzzle](#) and test your knowledge of lung cancer! The solution will appear in next month's issue.

For the solution to Colon Confusion [click here](#).

## Publications

- [Lung Tumor Cell Lines](#)
- [Genetic Alteration Panels](#)
- [Tumor Cell Panels](#)
- [p53 Hotspot Mutation Cell Panels](#)
- [ATCC Human Bronchial/Tracheal Epithelial Cells: Improving Functional Studies](#)



## Frequently Asked Questions

Q: Which EML4-ALK fusion variant does CCL-185IG contain?

A: The EML4-ALK gene fusion is caused by a chromosomal inversion that can produce constitutively active ALK tyrosine kinase protein, leading to enhanced cell survival and proliferation. There are multiple EML4-ALK fusion variants; the most prevalent is variant 1 (E13; A20), in which EML4 intron 13 is fused with ALK intron 20. The ATCC isogenic cell line CCL-185IG was created by using CRISPR gene editing technology and contains EML4-ALK fusion variant 1 (E13; A20).

[Have more questions?](#)

Cell Biology Collections

Cell Line Authentication

Facebook

Cell Biology Resources

Cell Culture Conversation

ATCC - 10801 University Boulevard, Manassas, VA 20110

© 2016 American Type Culture Collection. The ATCC trademark and trade name, and any other trademarks listed in this publication are trademarks owned by the American Type Culture Collection unless indicated otherwise.

\*Winning videos are limited to U.S. customers only; void where prohibited.

To receive emails from ATCC, please take a few minutes to update your profile [click here](#).

To Unsubscribe, [click here](#).

[Privacy Policy](#).