



# PI3K Genetic Alteration Cell Panel

TCP-1028™

## Description

The Phosphoinositide 3-kinases (PI3Ks) family of enzymes is integral to several signaling pathways that mediate cell proliferation, survival, migration and vesicular trafficking. Member of the PI3K family are frequently mutated or altered in human cancers. For example, gain-of-function mutations in p110 $\alpha$  (encoded by the PI3KCA gene) are observed in a variety of common cancers; and, these mutations are exclusively clustered in one of two hotspot regions, (i.e., exon 9 and 20), which correspond to either the helical or kinase domains of the protein (e.g., E545K and H1047R).

The PI3K Genetic Alteration Cell Panel (ATCC TCP-1028) is composed of ten human tumor cell lines from common cancer types that carry hotspot mutations within the PIK3CA gene. The PIK3CA status of each cell line has been sequenced and validated by ATCC. This panel is useful for PI3K pathway research and for anti-cancer drug discovery.

**Components:** ATCC CCL-225 HCT-15

ATCC CCL-237 SW948

ATCC CRL-1739 AGS

ATCC CRL-2577 RKO

ATCC HTB-112 HEC-1-A

ATCC HTB-121 BT-483

ATCC HTB-131 MDA-MB-453

ATCC HTB-178 NCI-H596

ATCC HTB-19 BT-20

ATCC HTB-27 MDA-MB-361

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## Storage Conditions

**Product format:** Frozen



**Storage conditions:** Vapor phase of liquid nitrogen

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## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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## BSL 2

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Cells contain parainfluenza virus type 5 (HPIV-5)

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: PI3K Genetic Alteration Cell Panel (ATCC TCP-1028)

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### References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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