

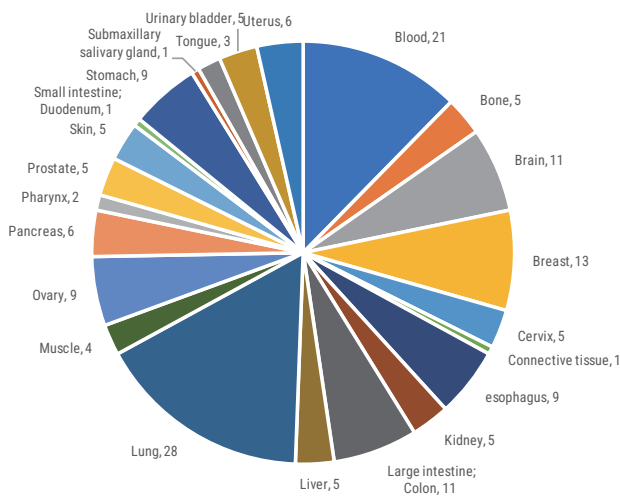
Cancer Cell Panel Screening and Profiling

Understanding Tumor Biology and Drug Response

ICECP™ cancer cell panel screening allows robust, flexible, and tailored profiling of test agents on 500+ cancer cell lines, encompassing various assays such as 2D proliferation, 3D proliferation, colony formation, and apoptosis, with no assay timeline constraints. For generated drug resistant cell lines, we perform RNA-seq-based bioinformatic analysis to investigate the mechanism. Utilizing our in-house algorithm, we can provide detailed information about differential gene expression, enriched pathway and featured gene profiling.

ICE Bioscience has established a predefined cell panel comprising 170 tumor cell lines, encompassing 21 cancer types.

Comprehensive Cell Panel: ICECP™ 170



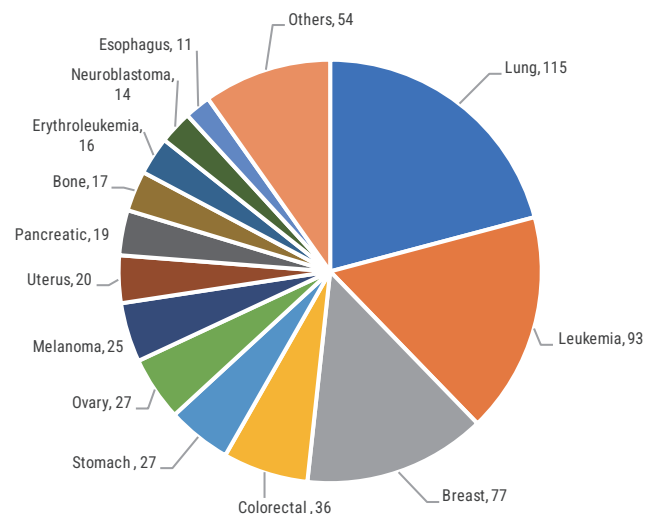
Cell Panel Applications

- Identify the sensitive tumor cell lines
- Identify the susceptible cancer types
- Cytotoxicity analysis of test agents
- Tissue specificity of cells
- Identify the most responsive tumor cell lines for subsequent studies on cellular models or animal studies
- Identify the genomic signature of your test agents for the prediction of anticancer drug response (Optional)

Choose from over 500 human tumor cell lines available in our ICE cell bank, with an ongoing addition of cell lines per month. Collaborators have the flexibility to select specific cell lines of interest from our cell bank to create a tailored Cell Panel for screening.

Features

- Various assay formats without timeline constraints
- Performed at any time and fast turnaround time
- High cell quality and clear cell source
- Single drug or combination drug testing
- Optional bioinformatics in-depth analysis



Specialized Cell Panels

ICECP™ DDR Cell Panel

Covers 10 cancer types with 80 tumor cell lines, including common types, gene-edited cells like BRCA-KO, and drug-resistant lines. Assays run for 7-14 days.

ICECP™ EGFR Mutation Cell Panel

Offers 70 Ba/F3 cell lines, featuring both wild-type and mutant EGFR, for testing EGFR inhibitors. Also provides assays for tumor cell lines with natural EGFR mutations and resistant lines.

ICECP™ KRAS Cell Panel

Provides 30 Ba/F3-KRAS mutant cell lines and 30 KRAS mutant tumor cell lines for assessing KRAS inhibitors' activity and selectivity.

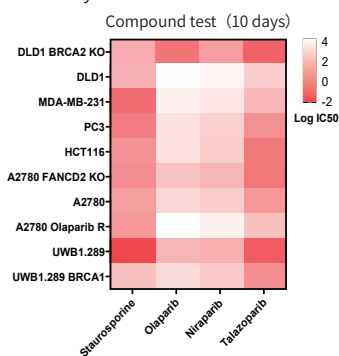
ICECP™ HER2-ADC Cell Panel

Comprises 65 cell lines, including 53 tumor lines with varied HER2 expression levels and 12 engineered Ba/F3 lines with HER2 mutations.

A Versatile Drug Response Platform With Custom Options

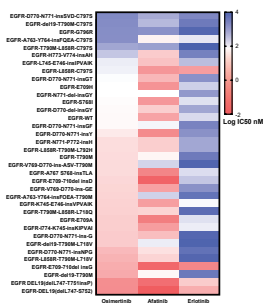
Long-term Cell Panel Screening

When testing with a DDR Cell Panel, it takes a longer time point to see the effects of the compound. Therefore, we offer 7-14 days of compound testing. The following figure shows the test results using 2D cell proliferation assay.



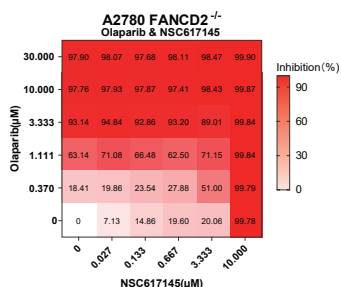
Ba/F3 Cell Panel Screening

Drug screening results in EGFR and KRAS Ba/F3 Cell Panel screening.



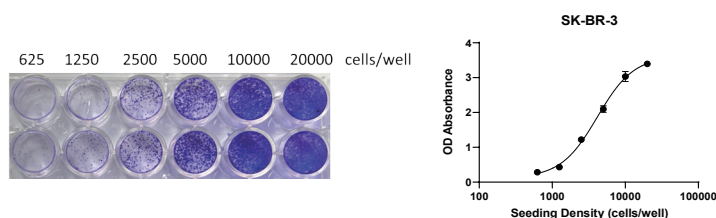
Combination Screening

We offer combination studies as matrix combination analysis based on Bliss Independence using 2D and 3D cell-based assays.



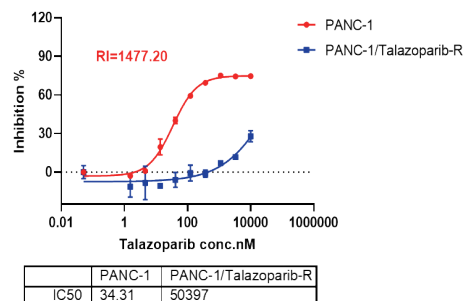
Clonogenic Assay

We provide cell clonogenic assay to determine single cells to survive and reproduce to form colonies.



Drug-resistant Cell Lines Screening

We have 60+ Drug-Resistant cell lines and gene edited cell lines for screening.



Bioinformatic Analysis

Our bioinformatic analysis of drug-resistant cell lines based on RNA-seq. Using our internal algorithms, we can provide detailed differential gene expression information, enrichment pathways, and characteristic gene profiles.

