

Cancer Pharmacology Services

- Integrated package of pre-clinical cancer pharmacology services
- For targeted oncology and immuno-oncology:
 - ✓ *In vitro* cell-free and cell-based assays
 - ✓ *In vivo* tumor models
- Multidisciplinary *ex vivo* PD analysis

In Vitro Assays

Biochemical assays

- HTRF, AlphaScreen, high throughput screening, FRET, ADP-Glo

Biophysical assays

- SPR with Biacore 8K, HTRF, ELISA,
- AlphaLisa FACS

Cellular assays

- Viability and cytotoxicity
- Spheroid/organoid
- **600+** human cancer cell lines
- **95+** PDX-derived cell lines



Confocal-TCS SP8



Cybio Felix



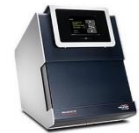
Echo655



Incucyte S3



Biacore 8K



MST

In Vivo Tumor Models

Targeted oncology

- **400+** CDXs/**30** cancer types
- **1,500+** PDXs/**30** cancer types
- Well annotated by **SOC** and gene expression profiling

Immuno-oncology

- **91** syngeneic models/**21** cancer types
- Transgenic mice for **20+** targets
- **65+** PBMC/HSC/NK humanized models

Translational models

- **61** orthotopic models/**15** cancer types
- **80** metastatic models/**10** cancer types
- **160** drug resistant models/**14** key targets Hamster and rat models

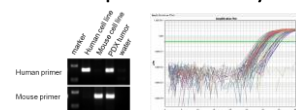
Informative online database

- **2,100+** model datasets
- Growth kinetics: **3,000**
- Histopathology: **2,800**
- Pharmacological sensitivity: **4,000**

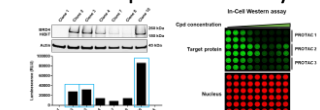
Ex Vivo PD Analysis

Molecular PD assays

Gene expression analysis



Protein expression analysis



Cytokine expression analysis



Histopathology

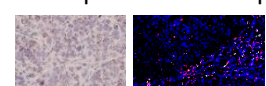
Single IHC/IF



Multiplex IF up-to 12 colors



BaseScope and RNAScope



Flow cytometry

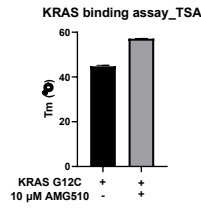
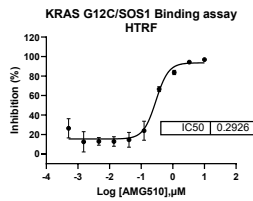
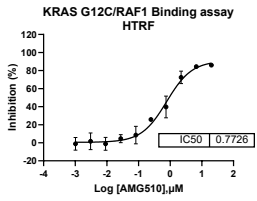


- Cytex Aurora (**40** colors)
- BD LSR Fortessa X20 (**18** colors)
- BD Canto II (**8** colors)
- Intellicyt iQue3

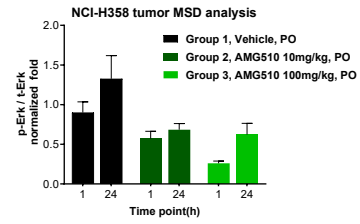
- BD LSR Fortessa (**18** colors)
- BD Canto plus (**10** colors)
- BD FACS Aria II (**18** colors)

Case Study: Pharmacological Evaluation of a KRAS G12C Inhibitor

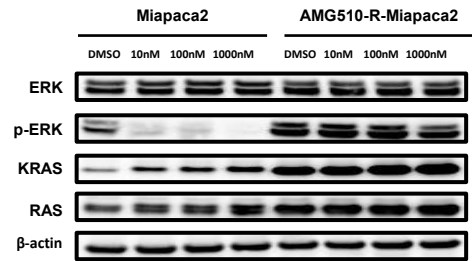
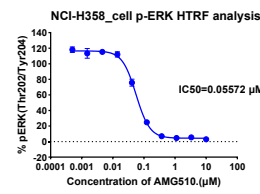
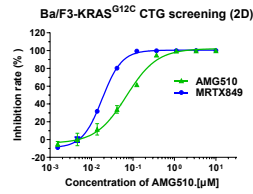
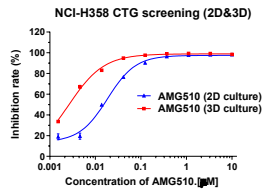
Protein-based screening



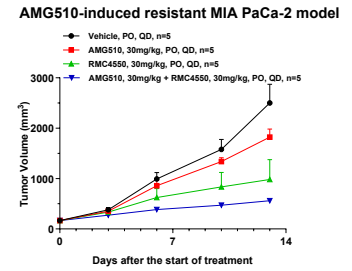
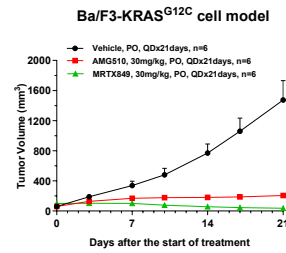
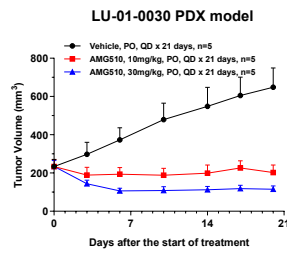
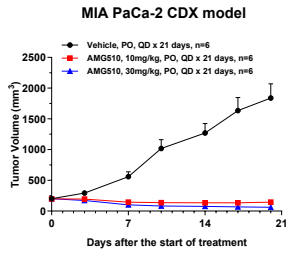
Ex vivo PD analysis



Cell-based screening and MOA

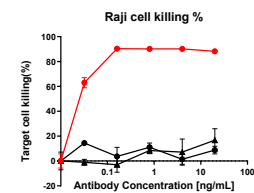
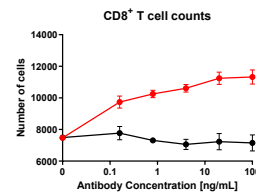
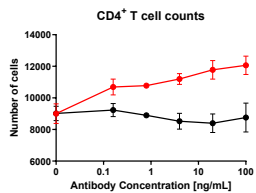
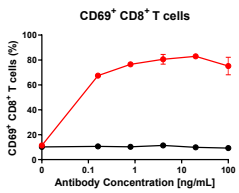
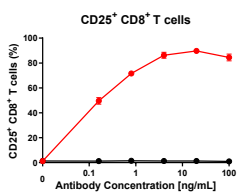


In vivo model efficacy study



Case Study: Pharmacological Evaluation of an Anti-CD19/CD3 BsAb

T cell activation/ proliferation/ mediated killing assay



In vivo model efficacy study

