

# 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



## -in vivo tumor models

- **Targeted oncology**  
**360+** 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  
**25+** PBMC/HSC/NK humanized models
- **Translational models**  
**42** orthotopic models/**15** cancer types  
**37** metastatic models/**10** cancer types  
**40** 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

Meso Scale Discovery (MSD)    Luminex Multiplex System

### Histopathology

Single IHC/IF

Multiplex IF up-to 12 colors

BaseScope and RNAScope

### Flow cytometry

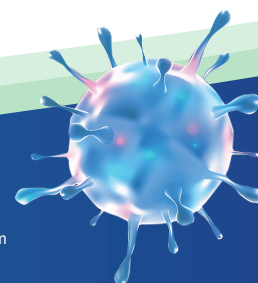
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BD LSR Fortessa (**18** colors)  
BD LSR Fortessa X20 (**18** colors)  
BD Canto plus (**10** colors)  
BD Canto II (**8** colors)  
BD FACS Aria II (**18** colors)  
Intellicyt iQue3



### Contact us

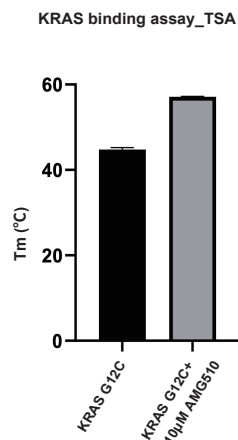
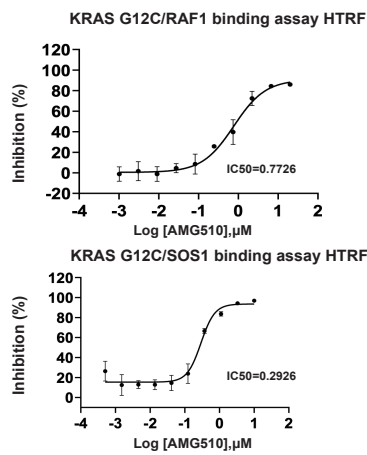
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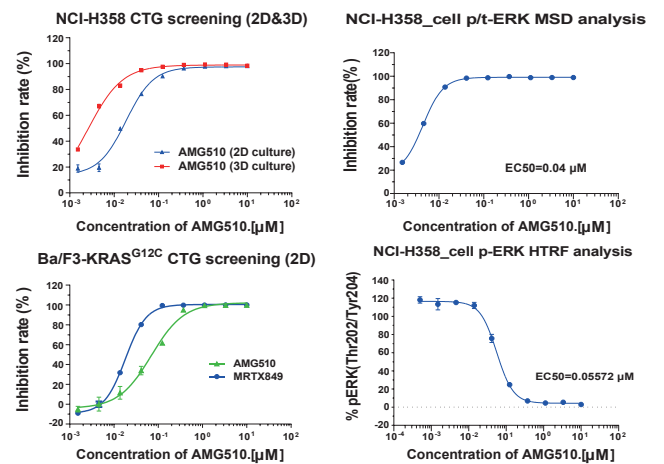


# Case study: pharmacological evaluation of a KRAS G12C inhibitor

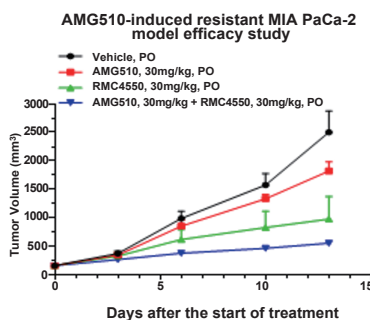
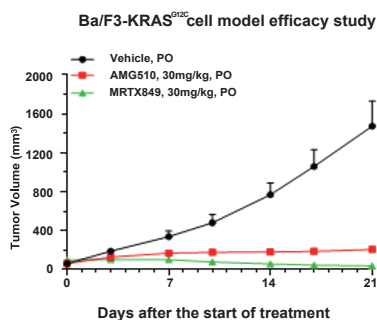
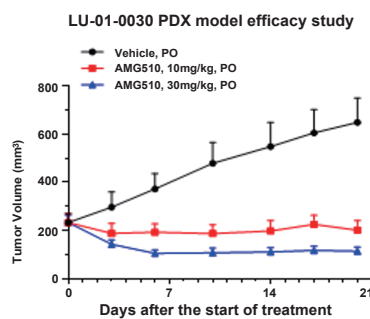
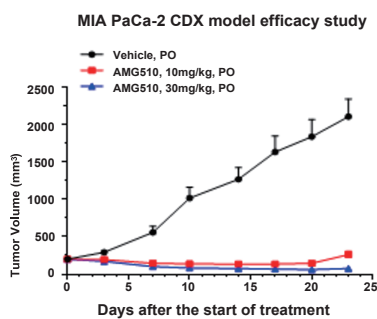
## 1 Protein-based screening



## 2 Cell-based screening and MoA



## 3 in vivo model efficacy study



## 4 ex vivo PD analysis

