

# Immuno Oncology Assay Services

Immune cell profiling and characterization services from discovery to efficacy testing

Biochemical Assays	Effector Cell Phenotype & Function	Cytotoxicity Co-culture	In vivo Models
<b>Binding Kinetics</b> SPRI Analysis Competition Selectivity <b>Functional Binding Assays</b> <b>Thermal shift</b> <b>Custom Assays</b>	<b>Effector cells</b> T cell proliferation, activation T cell or NK phenotyping Cytokine determination Antibody Dependent Cell Cytotoxicity (ADCC) Complement Dependent Cell Cytotoxicity (CDC) Immune check point inhibitors <b>Monocytes/Macrophages</b> Differentiation Phagocytosis	<b>Target Killing Assays</b> 2D Luciferase-based 2D Flow-based 3D Luciferase-based	<b>Humanized Syngeneic Xenograft</b>

## Antibody Dependent Cell Cytotoxicity (ADCC) Assay

Antibody-Dependent Cell-mediated Cytotoxicity (ADCC)

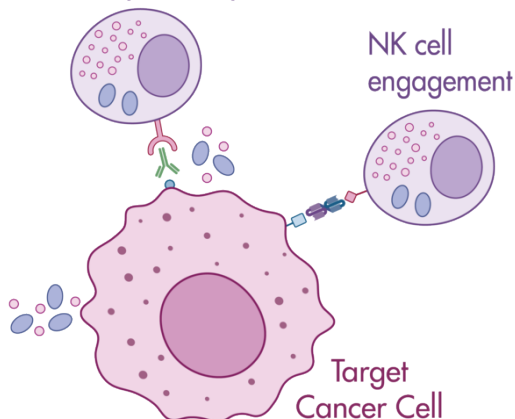


Figure 1. Mechanism of ADCC based cell cytotoxicity. The therapeutic antibody recognizes the antigen receptors on the target cells via its Fab domain, while the Fc portion of the antibody binds to the Fc receptors on immune cells such as Natural Killer cells or monocytes

We have established several ADCC model assays that can be used to test your antibody drug

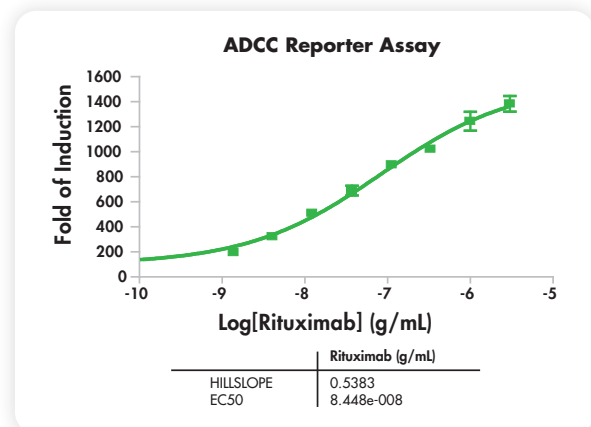
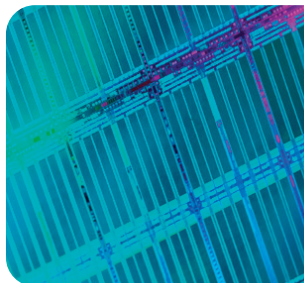


Figure 2. Engineered Jurkat T cells stably expressing the FcγRIIIa receptor, V158 variant and an NFAT response element driving expression of firefly luciferase. Tested against Raji target cells using Rituximab (Anti-CD20 chimeric monoclonal antibody drug).

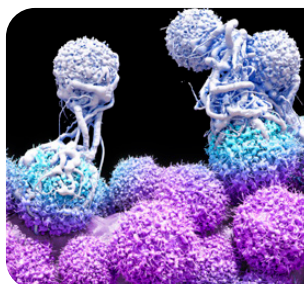


# OUR SERVICES



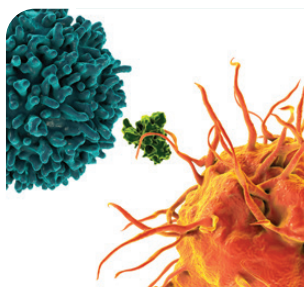
## Biophysical Assays

Surface Plasmon Resonance • Thermal Shift • Isothermal Titration Calorimetry  
Microscale Thermophoresis • Custom-tailored Assay Development  
Investigate affinity, kinetics, competition, binding selectivity,  $K_i$ , reversibility



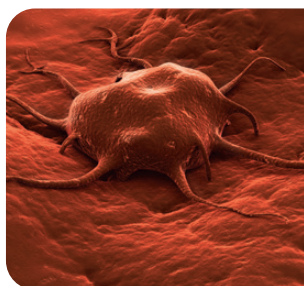
## Immune Cell Profiling

ADCC and functional characterization • Immunophenotyping  
Cytokine Analysis • Cell Proliferation • Macrophage Differentiation & Phagocytosis  
Complement Dependent Cell Cytotoxicity (CDC) • Immune check point inhibitors



## Cytotoxicity Assays

2D Flow-based • 2D Luciferase-based  
Spheroids • NK Cell Killing Assays



## In vivo Tumor Models

Syngeneic • Humanized • Xenograft  
SubQperior • Orthotopic • Metastasis

Contact us to discuss your project

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