

In Vitro Characterization Services

- Binding and competition assays
- ADC-related assays
- T cell engager (TCE) assays
- Autoimmune and inflammation assays

In vitro characterization of biologics is crucial for the development of effective biologics candidates. At WuXi Biologics, the CRO Services Department provides comprehensive *in vitro* assays for diverse modalities such as antibodies, fusion proteins, cytokines, BsAbs, antibody-drug conjugates (ADCs), and more. Leveraging insights from publications, patents, and extensive hands-on experience, our platform efficiently streamlines candidate screening and characterization with exceptional quality, consistency, and speed.

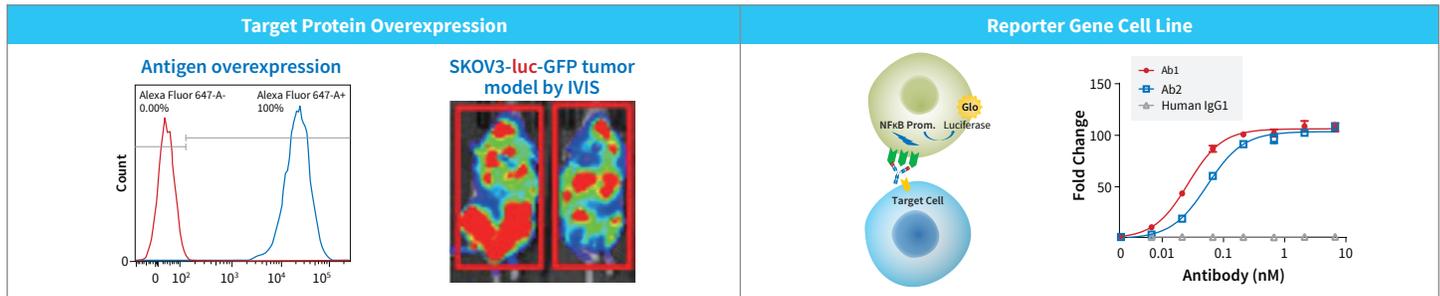
One-Stop, Integrated *In Vitro* Platform

Our integrated suite of *in vitro* assays allows for a comprehensive evaluation of various targets and therapeutic modalities including antibodies, proteins, cytokines, BsAbs, and ADCs.

Binding and Competition Assays	ADC-Related Assays	T Cell Engager Assays	Autoimmune and Inflammation
<ul style="list-style-type: none"> • ELISA, FACS, SPR, FRET • Single antigen binding • Dual binding • Receptor-ligand blocking • Epitope binning 	<ul style="list-style-type: none"> • Internalization • Cytotoxicity • Bystander killing • Serum/plasma stability (DAR, payload) 	<ul style="list-style-type: none"> • TCE reporter gene assay • T cell killing • Cytokine release • T cell activation 	<ul style="list-style-type: none"> • Immuno reporter gene assay • Cell functional assay • Immune assays • ECD shedding • ADCC, ADCP, CDC

Custom Cell Line Development for Bioassays

With over 500 custom cell lines developed, we bring our unparalleled expertise in cell line development to bioassays. Our advanced, tailored solutions use cutting-edge techniques, including random integration, Flp-In system, and lentiviral system.

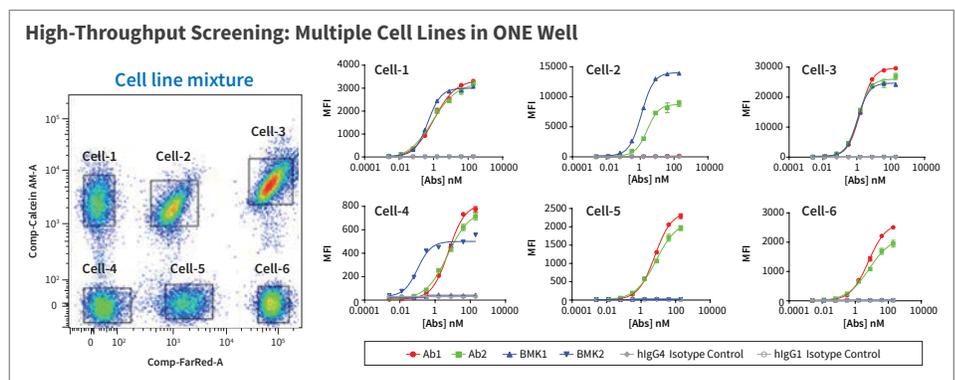


Case Studies

Our advanced *in vitro* platform has proven effective in evaluating challenging molecules and assessing their functional properties. The following case studies highlight key aspects of drug candidate characterization to ensure optimal lead selection.

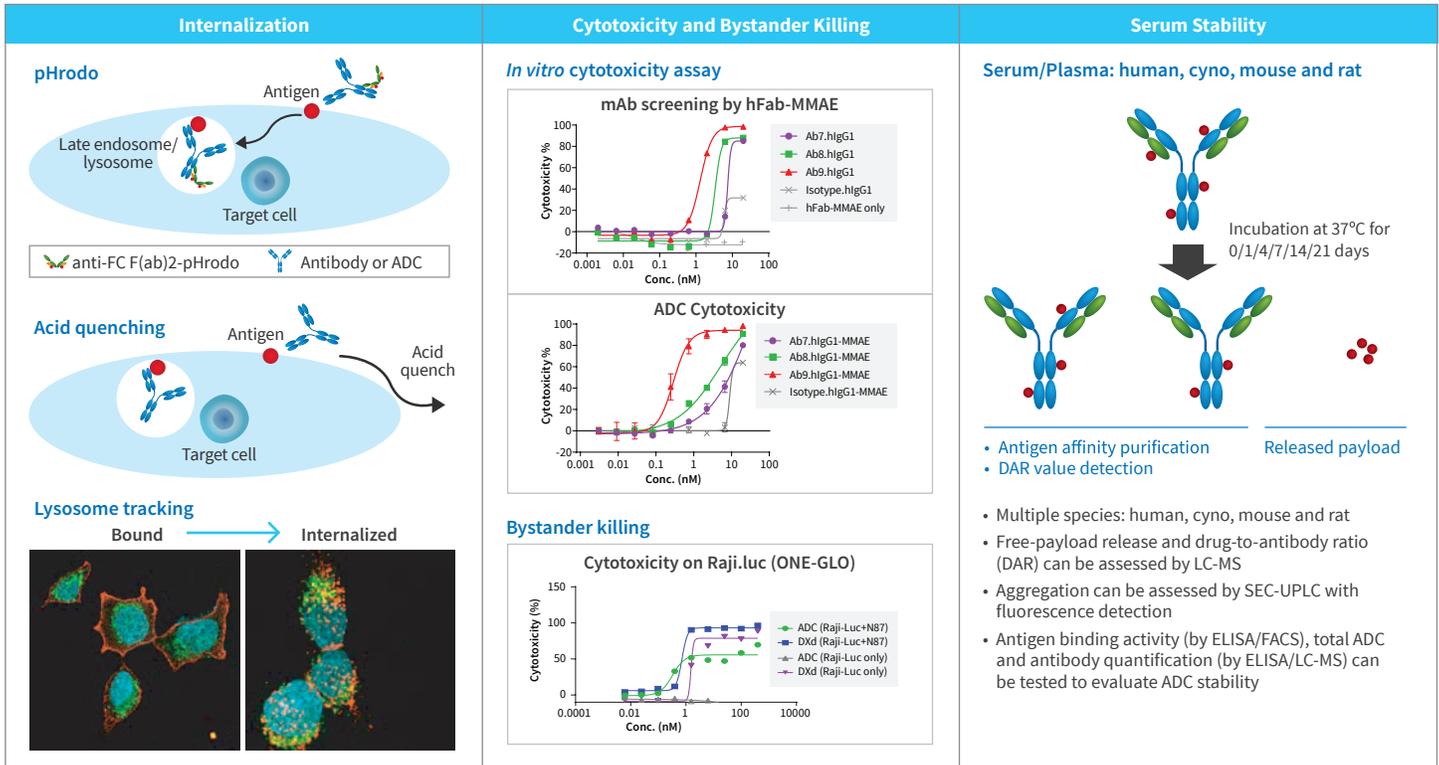
Case Study 1: Binding and Competition Assays

Our binding assays use a range of methodologies, including protein-based assays such as ELISA and SPR, and cell-based assays like cell ELISA, flow cytometry, and FRET, with high-throughput modes available. Additionally, we offer dual-binding analysis for bispecific antibodies and complex interactions, including cell-to-cell, protein-to-protein, and cell-to-protein binding.



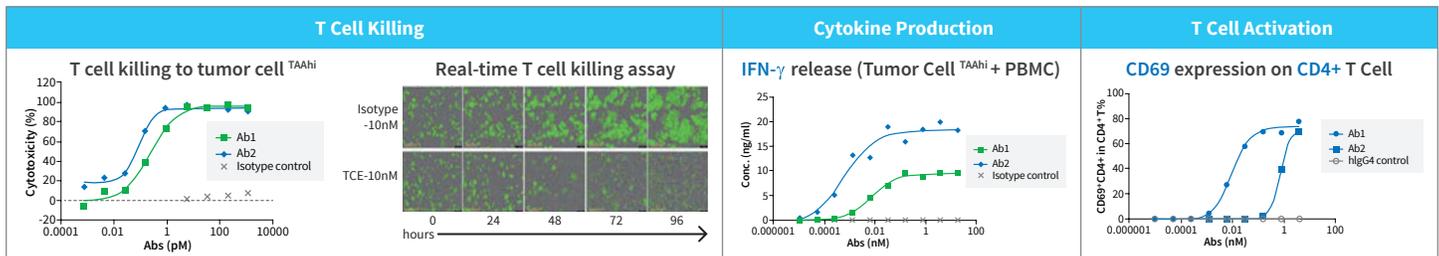
Case Study 2: In Vitro Characterization of ADCs

In vitro characterization of ADCs encompasses essential assays, including internalization, cytotoxicity and bystander killing, and plasma stability tests. These assays provide critical insights into the functionality and stability of ADCs.

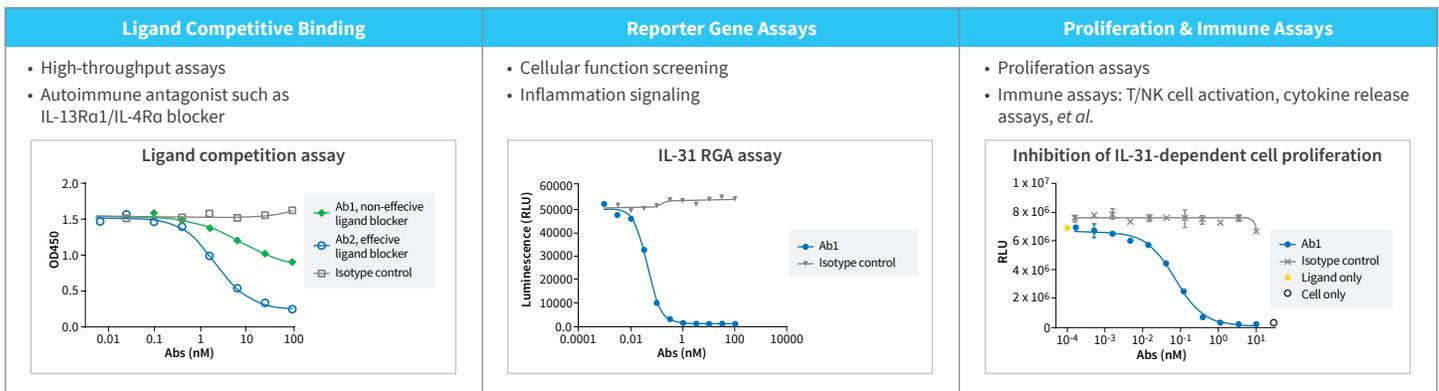


Case Study 3: In Vitro Characterization of TCEs

In vitro characterization of TCEs includes assays for T cell killing, activation, and cytokine release, providing a comprehensive evaluation of TCE efficacy.



Case Study 4: In Vitro Characterization of Autoimmune and Inflammation Molecules



About WuXi Biologics

WuXi Biologics is a leading contract research, development, and manufacturing organization (CRDMO) that provides end-to-end capabilities to healthcare organizations worldwide. With operations in China, the United States, Ireland, Germany, and Singapore, we enable our partners to effectively and efficiently bring biologics and vaccines to patients worldwide through our comprehensive and high-quality drug development model.

The world's leading global single-source platform from concept to commercialization

wuxibiologics.com | PS_BD@wuxibiologics.com