

One-Stop Antibody Discovery and Optimization

- Single B cell
- Phage and yeast display
- Hybridoma

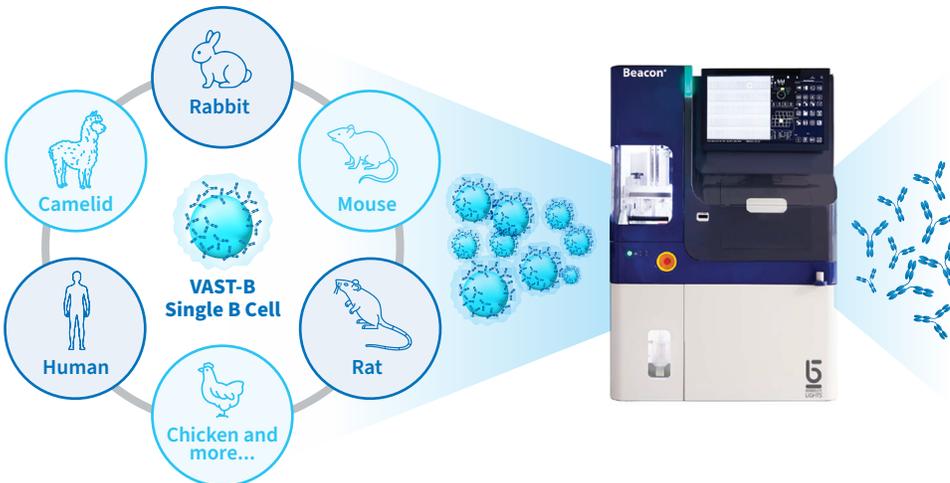
Cutting-Edge Discovery Platforms to Expedite mAb Discovery Across Projects

WuXi Biologics offers a comprehensive suite of discovery platforms across diverse species, with a proven record of success in over 400 antibody discovery projects. Our extensive species coverage and advanced technologies provide optimized, species-specific solutions for rapid lead identification.



Rapid, All-Species Single B Cell Technology

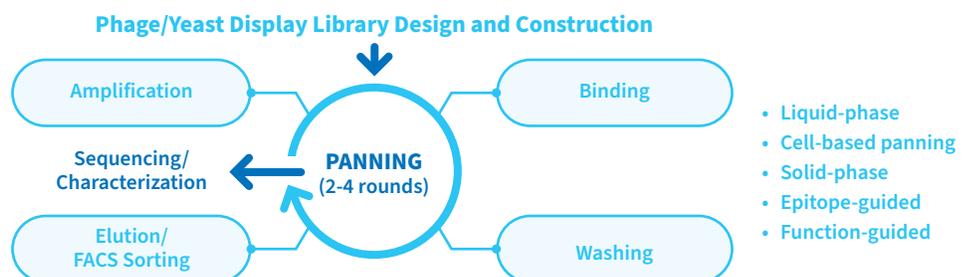
Our streamlined workflow enables the rapid production of mAbs from any species.



- **Immunization (1–3 months):** Multiple immunization strategies—including protein, DNA, cell, peptide, VLP, and mRNA—to elicit a robust immune response
- **MACS or FACS enrichment (1 day):** Proprietary methods for plasma cell enrichment and memory B cell activation
- **Beacon single B cell selection (1 day):** A miniaturized, HTP platform for optimal lead screening
- **Single B cell sequencing (1 week):** Unique PCR primers for natural VH/VL pairing across multiple species

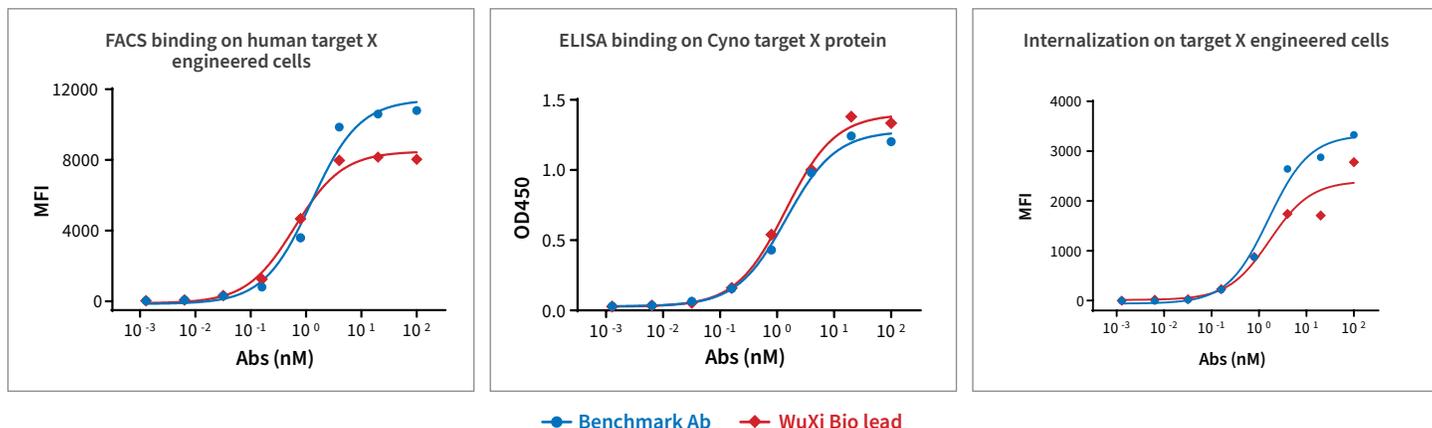
High-Quality Phage and Yeast Display

High-quality phage and yeast display libraries facilitate the enrichment of specific and diverse antibodies through HTP panning and FACS sorting, enabling the selection of optimal candidates with high specificity for downstream applications.



Case Study: High-Quality Lead Molecule Identification from a Human Synthetic VHH Phage Display Library

We identified a VHH lead molecule that exhibited superior binding affinity, internalization, yield, and stability compared to a benchmark antibody.

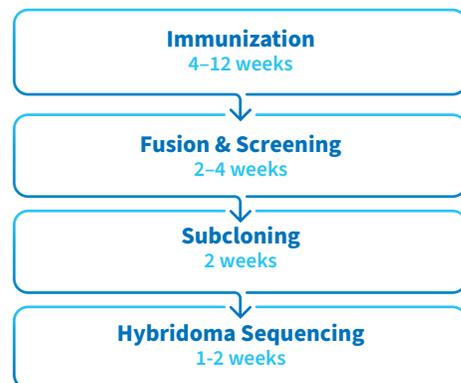


● Benchmark Ab ◆ WuXi Bio lead

Ab	Human target X binding FACS EC ₅₀ (nM)	Cyno target X binding ELISA EC ₅₀ (nM)	Internalization EC ₅₀ (nM)	Yield (mg/L)	DSF T _{m1}
Benchmark Ab	1.3	1.5	1.6	NA	NA
WuXi Bio lead	0.6	1.4	1.7	490	63.4 °C

Cutting-Edge Hybridoma Platform

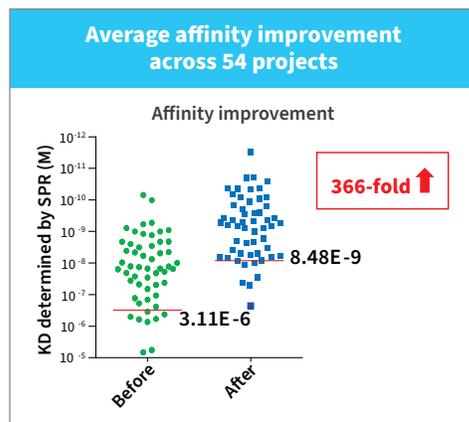
Immunization & Fusion	High-Throughput Screening	Experience
<ul style="list-style-type: none"> AAALAC-accredited, licensed animal facility Diverse immunogen choices (DNA, mRNA, peptide, protein, and cell) Proprietary immunization protocols High-efficiency electrofusion Semi-solid subcloning techniques 	<ul style="list-style-type: none"> ELISA and FACS binding assays Reporter gene assays for functional screening Internalization assays for ADC development 	<ul style="list-style-type: none"> Over 300 successful projects using the hybridoma antibody discovery platform Proven expertise with diverse targets, including CD3, CD19, PD1, PD-L1, GPCR, and small molecules (payload)



WuXi Biologics' Proprietary Platforms for mAb Optimization with Improved Affinity

Our proprietary optimization platforms average a 366-fold increase in mAb affinity across more than 50 affinity maturation projects.

- Parsimonious or multi-site mutagenesis screening to identify hot-spot regions
- Construct and design hot-spot combinatorial library with customized diversity at each targeted position
- Extensive-diversity space with library size up to 10⁹
- Simultaneous PTM risk removal



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

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WuXi Biologics
Global Solution Provider