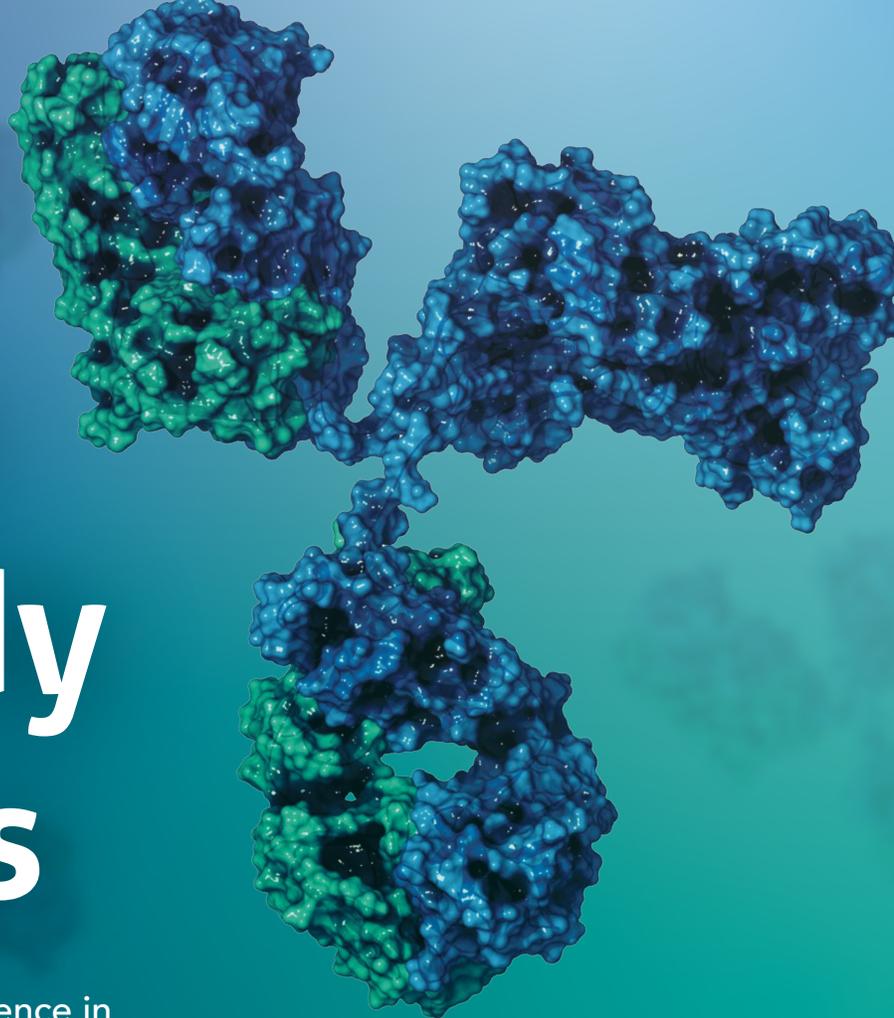




proteintech[®]

Custom Antibody Services



Leveraging over 20 years of experience in antibody development, Proteintech scientists can fulfill all your custom antibody needs starting from antigen design and synthesis to large-scale production, characterization and conjugation of your antibody.

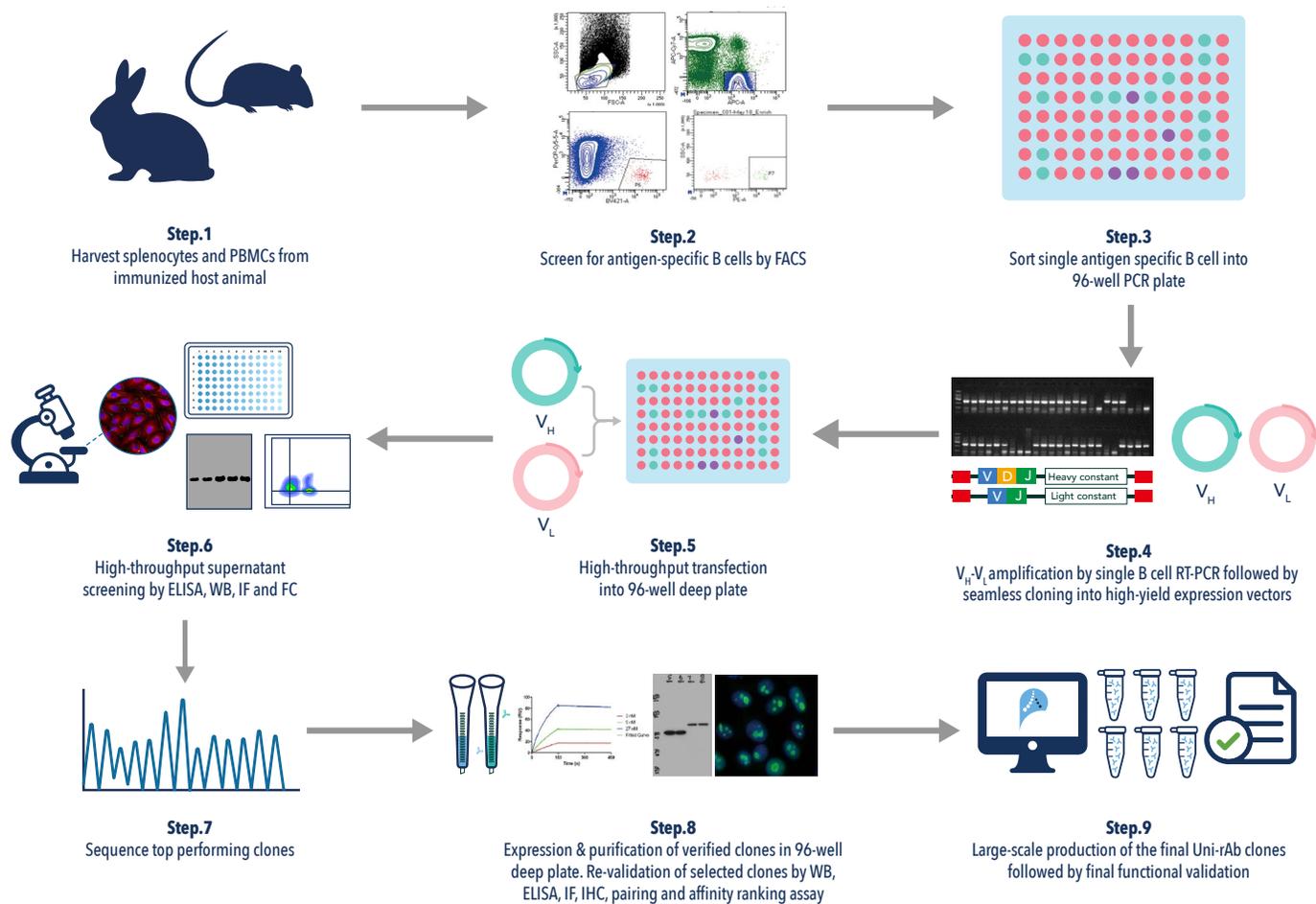
Our custom services include:

- Recombinant Antibody Development
- Antibody Engineering
- Custom VHH/Nanobody Development
- GMP Antibody Manufacturing
- Custom Conjugation
- Custom Formulation
- Antibody Characterization



Our Recombinant Platform

Proteintech's Antigen Specific B-Cell Cloning & Engineering (ABCE™) platform combines the in-depth technical expertise of our R&D team with recent advancements in antibody technology and cutting-edge automation to enable multi-species recombinant antibody discovery of desired targets with a rapid turnaround. The ABCE™ platform achieves stable and high expression of recombinant monoclonal antibodies by cloning antibody heavy and light chain sequences derived from antigen-specific B cells into high-yield expression vectors followed by their introduction into suitable mammalian expression systems.



Recombinant antibody development workflow on the ABCETM platform.

Platform Benefits

High specificity

The ABCETM platform relies on antigen-specific single B cell sorting leading to the generation of recombinant monoclonal antibodies with native V_H-V_L pairings that is critical for maintaining antibody specificity and functionality.

Fit-for-purpose antibodies

Recombinant antibodies developed on the ABCETM platform are rigorously screened and validated at various stages of development to ensure high antigen affinity and excellent performance in applications tailored to individual projects needs.

Faster turnaround

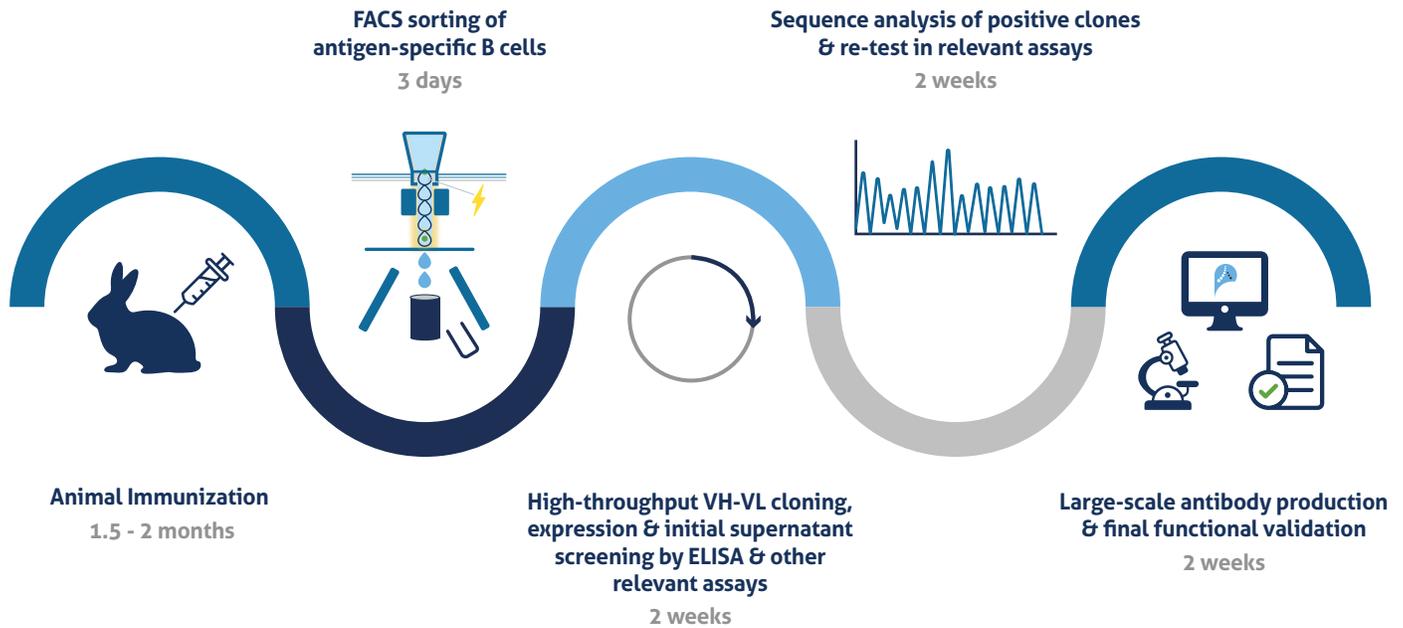
The ABCETM platform enables higher number of target-specific clones to be obtained from a small number of cells and in a shorter time compared to traditional antibody development approaches, resulting in a higher probability of success with a faster turnaround

Security of supply

Recombinant antibodies developed on the ABCETM platform are sequence defined, and therefore, can be reproduced at any desired scale based on specific project needs. This ensures security of supply with high lot-to-lot consistency for long-term projects.

Why Trust Us

- 20+ years of antibody development experience
- 25K+ in-house manufactured antibodies
- 13K targets covered
- 200K+ product citations



Projected timeline for custom recombinant antibody development on the ABCETM platform.

What to Expect from Us



Flexible Customization Options

We can develop recombinant antibodies from a variety of starting material including customer provided antibody or immunogen sequence, plasmids or from scratch. Moreover, we offer the flexibility to choose from a wide range of host species, antibody formats, purification strategies and antibody characterization services.



Milestone-based Approach

We adopt a milestone-based approach for all custom antibody projects wherein every project is organized into several phases or milestones. Only upon successful completion of one phase, the project moves to the next phase. This minimizes the risk of failures and allows you to have more control over your project.



Ph.D. Level Technical Support

We have Ph.D. level technical experts to help you navigate through every step of your custom project starting from understanding your projects needs and helping you make decisions to regularly updating you on the progress at every stage of your project.



Data Confidentiality

We ensure that data confidentiality is a top priority for all custom projects. Recombinant clones developed by us for custom projects are owned by the customers and will not be commercialized or shared with any third parties. Any protein or antigen sequences shared with us will remain confidential.

Our Process



Our Capabilities

In addition to developing recombinant monoclonal antibodies, we can help you with a wide range of custom antibody services listed below.

Antibody Engineering

- Fab, F(ab') fragments
- scFv, scFv-Fc, VHH-Fc
- Fc modifications including Fc silencing
- Chimeric antibodies
- Bi-specific antibodies
- PTM-specific antibodies
- Humanized antibodies

Custom VHH/Nanobody

- Protein and DNA immunization
- Fast screening of a proprietary synthetic library
- Development of epitope and affinity optimized VHHs
- Site-specific conjugation

GMP Antibody Manufacturing

- Production of antibodies in compliance with ISO 13485:2016
- Quality check at every step of development
- Raw material qualification
- Regulatory support and detailed documentation

Custom Conjugation

- Conjugation of various fluorescent dyes, enzymes, peptides and oligonucleotides
- Site-specific and stoichiometric conjugation
- Development of antibody-drug conjugates (ADCs)

Custom Formulation

- Carrier-free formulations for use on specialized platforms
- Ultra low endotoxin antibodies for in vivo use
- Other custom formulations upon request
- Specific antibody concentrations

Antibody Characterization

- ELISA and antibody pairing
- FACS binding and blocking
- Functional assays including WB, IP, IHC, IF & FC
- Neutralization test
- Affinity measurement
- EC50/IC50 measurement