

DEVELOPMENT OF MONOCLONAL ANTIBODIES

Antibody Source

Creative Biolabs can offer a series of good source for specific antibody discovery and development, which including but not limited to a wide range of host animal species, transgenic rodent, and high-quality premade libraries. In terms of our advanced antibody discovery techniques, we can discover mAbs from a broad range of species and also the Native™ human mAbs with naïve paired heavy-and light-chain.

Hybridoma

The B cell that produces antibodies are harvested from the mouse and are in turn fused with immortal B cell cancer cells, a myeloma, to produce a hybrid cell line called a hybridoma.

B-cell Sorting

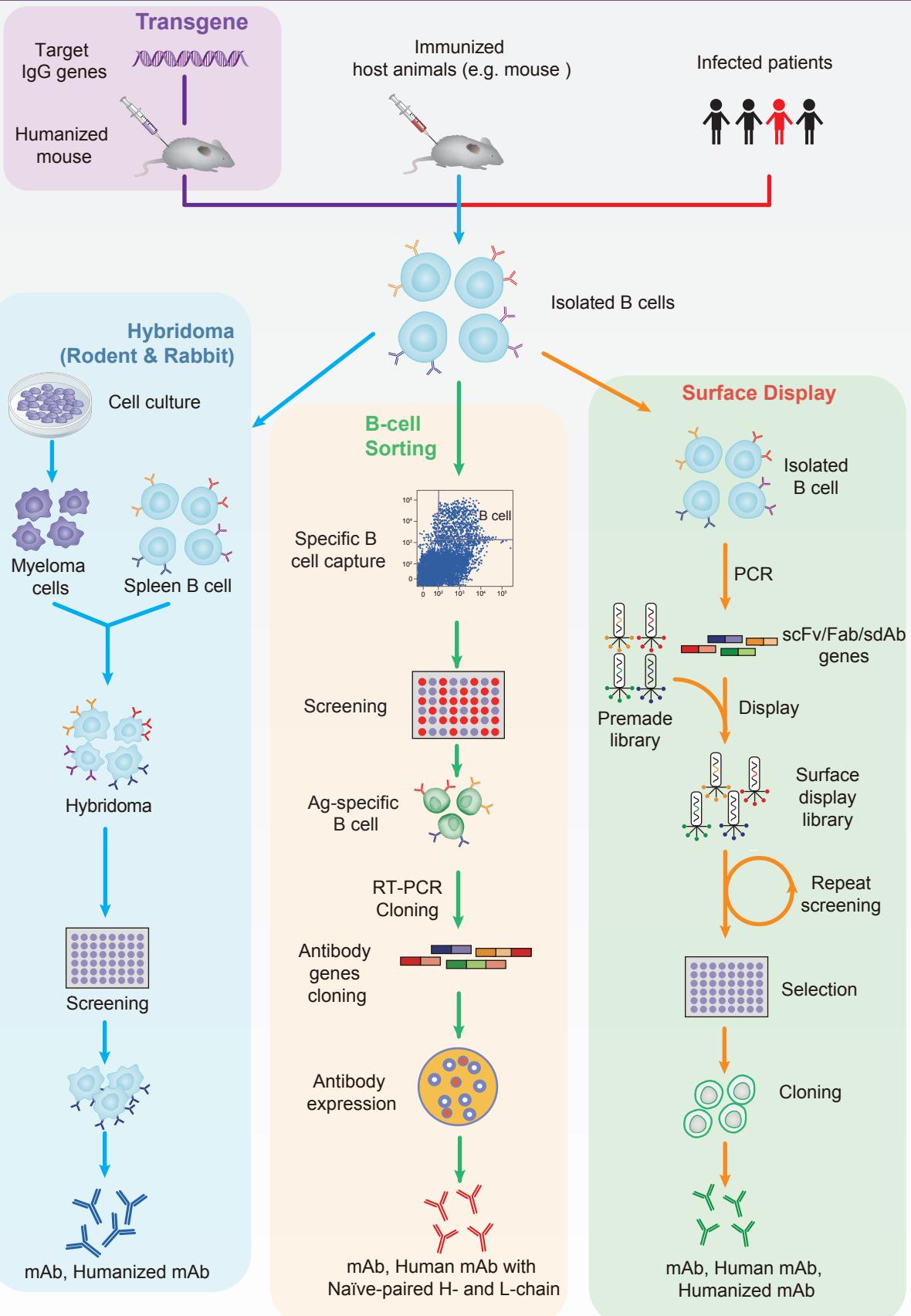
Antigen-specific B cells can be captured by flow cytometry technology. Antibody light and heavy chain variable gene sequences are amplified from single B cells by RT-PCR. Then the gene transcripts are sequenced, identified and analyzed. To determine the properties of antibodies, the Ig gene are cloned into expression vectors for recombinant production.

Surface Display

Human VH and VL antibody genes are isolated from naïve or infected individuals and randomly cloned for surface display. Currently developed surface display systems are mainly based on phage, bacteria, yeast, ribosome, and mammalian cell.

Antibody Production & Purification

We can generate high purity antibody products as scFv, Fab, IgG or other fusion protein format. A broad range of expression system is also available for recombinant production, which including but not limited to bacterial system, mammalian system, yeast system, and insect system.



WHAT WE DO: One-stop Hybridoma Development Services

- Antigen Preparation
- Immobilization
- Hybridoma Generation
- Hybridoma Screening

In Vitro Surface Display Services

- Phage Display Service
- Bacterial Display Service
- Ribosome Display Service
- Yeast Display Service
- Mammalian Cell Display Service

Native™ Antibody Discovery by B Cell

- Native™ Human Antibody
- Native™ Monkey Antibody
- Native™ Mouse Antibody
- Native™ Camel Antibody
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