

Why You Should Consider Using Recombinant Antibodies



The use of recombinant antibodies has been growing steadily due to their well-documented advantages, including high specificity, sensitivity, and reproducibility. However, many researchers haven't yet made the switch from traditional monoclonal and polyclonal antibodies. If you are one of those holdouts, whether due to uncertainty of the benefits, a reliance on precedents from the literature, lab preferences, price, or other scientific considerations, download this infographic now to help you decide whether recombinant antibodies are right for your experimental needs.

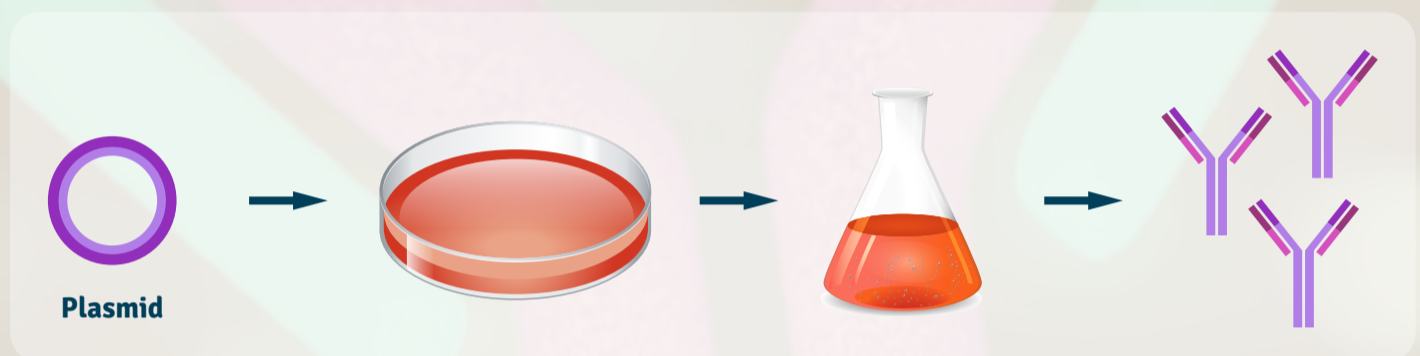
Baby steps

For the truly change averse, it might be comforting to know that many classic research antibodies are now available as recombinant versions. So you can benefit from the improved reproducibility recombinant products offer, while still being able to use antibodies you are familiar with.

Recombinant antibody production

Generating antibodies via recombinant methods has many benefits including:

- Speed, production is considerably faster than generating hybridoma-derived monoclonals
- Scalability, the process is more controllable and can be more easily scaled
- Ethical, use of animal-free methods alleviates concerns around the use of animals for research
- Excellent batch to batch reproducibility as a result of a known DNA sequence that can be replicated

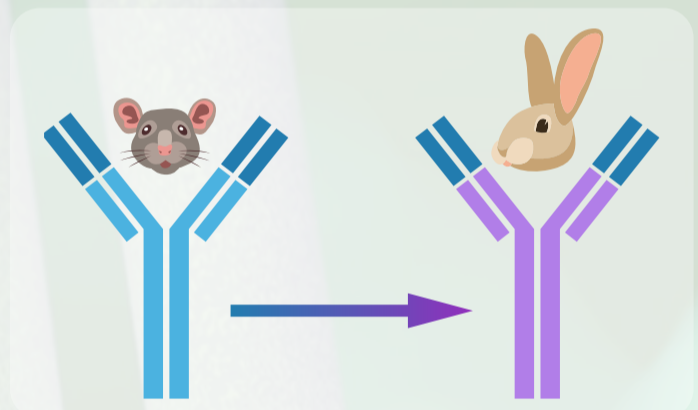


Engineering edge

Recombinant antibodies are highly customizable. They can be modified to:

- Improve their binding affinity
- Increase their stability
- Reduce their immunogenicity
- Alter their species

This flexibility opens up new experimental possibilities for *in vitro* and *in vivo* use



Manufacturing control

Manufacturers typically have tight control over their recombinant antibody production. For many antibody manufacturers, recombinant antibodies are made from start to finish on-site—including antigen generation, immunization, purification, screening, and validation. This control allows manufacturers to share any data that is generated with their customers, maximizing their chances of success in the lab.

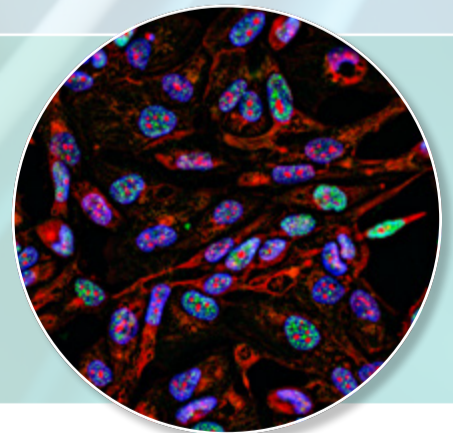
Disadvantages

The pros definitely outweigh the cons with recombinant antibodies, but we would be remiss if we didn't mention a few disadvantages, including

- Potentially higher cost
- Some recombinant antibody types can be difficult to produce
- Production requires considerable technical expertise

Applications

- Suitable for a wide range of applications including immunohistochemistry, flow cytometry, western blotting and immunofluorescence
- Recombinant oligoclonal antibodies are ideal for applications where polyclonal antibodies are traditionally used
- Applicable to *in vitro* diagnostic (IVD) testing



Additional resources from Biocompare

- [The Benefits of Recombinant Antibodies](#)
- [When to Use Recombinant Antibodies](#)
- [Recombinant Antibodies: Advantages and Applications](#)
- [Recombinant Antibodies](#)
- [Recombinant Antibody Production Services](#)