

# CARVE A PATH TO SUCCESS IN CELL CULTURE

## ELEVATING YOUR ADVANCED ANTIBODY THERAPEUTIC DEVELOPMENT

The first monoclonal antibody (mAb) was approved by the United States Food and Drug Administration (FDA) in 1986, carving a path for new medical advancements to meet unmet clinical needs.

Since then, there has been a drive for even more targeted therapies, leading to the development of advanced, next-generation antibody therapeutics. These advanced antibodies offer new possibilities for precision and effectiveness, with higher specificity, greater potency, and improved safety profiles.

However, to effectively scale up processes and treat complex diseases, developers need to consider the unique cell culture requirements of these advanced antibodies.

### Bispecific antibodies (BsAbs)

Capable of binding two different targets simultaneously, enhancing precision and efficacy.

**Key need:** Medium conditions that support efficient folding and the correct assembly of dual-binding sites.

### Antibody fragments

Smaller and more agile than full antibodies, enabling deeper tissue penetration.

**Key need:** Medium conditions that promote high expression and stability while facilitating efficient secretion.

### Antibody-drug conjugates (ADCs)

Harness the specificity of antibodies combined with the potency of cytotoxic drugs.

**Key need:** Medium conditions that can support both antibody and linker stability.

## 4 KEY ELEMENTS TO HELP YOU REACH THE TOP

When developing a cell culture process suitable for scaling an advanced antibody therapeutic, there are several key elements that need to be considered.

1

### High-performing media and feeds

High-quality, consistent, and scalable media and feeds that can deliver excellent results off-the-shelf, and act as a foundation for further customization.

2

### Comprehensive media development services

Including in-depth analytics, customization, and rapid prototyping, to help develop tailored solutions that meet the unique requirements of advanced antibody therapeutics.

3

### Experienced support and troubleshooting

Through collaboration with a media supplier that has experience in advanced therapeutics and can help streamline process optimization.

4

### A supplier that grows with you

Collaborative relationships that adapt to evolving needs in order to help navigate the early stages of advanced antibody development and beyond.

## CONQUERING EVEN THE STEEPEST SLOPES

The potential of next-generation mAbs is enormous, with these innovative therapeutics set to enhance the world of targeted medical treatments, but their potential is also limited by the need for developers to find the right, optimized processes. Elevated cell culture processes that can help developers reduce costs, minimize complexity, and slide down a smooth path to market are key.

No matter the terrain—whether it's fresh powder, icy patches, or demanding moguls—it's important to find the right equipment and support to enable you to navigate the development of these next-generation therapeutics.

