

### **ThermoFisher** SCIENTIFIC

**Media solutions overview** 

The world leader in serving science







The world leader in serving science



# A Mission we are proud of



We enable our customers to make the world healthier, cleaner and safer



# A commitment to scientific advancement



We offer products and solutions that enable customers to push the boundaries of innovation

- Customer focus
- Leading portfolio
- Scale of capabilities



Dedicated to innovating, designing and enhancing culture media and supplements

- Difco<sup>™</sup> supplements are now part of the Gibco<sup>™</sup> cell culture portfolio, which offers a full line of supplements, feeds, and cell culture media for the biotechnology, biopharmaceutical, and animal and human vaccine markets.
- The Difco product brand was established in 1895 and represents more than a century of knowledge in innovating, designing and enhancing culture media and supplements.
- To date, our peptones and supplements have been used in the manufacture of more than 150 biopharmaceutical drugs in the human and animal health markets.
- Combined commitment to innovation and product consistency.





# Our products and services focus on getting you optimal results

Products	Services	Manufacturing		
Supplements and specialty media Consistent performance with low variability	Media design and optimization Full access to our expertise to enable faster development time	State-of-the-art bioproduction media manufacturing Scalable operations certified ISO:9001		
		<image/>		

"End-to-end" technical and life cycle support



# Media solutions

Let us keep your process development running smoothly



Media enrichment services For customers seeking to enhance the performance or reduce the variability of existing media.		Media design services Ideal for customers looking to build new media specific to their cell lines and optimized to their application.		Media bioproduction services Services for customers interested in manufacturing bench- and production-scale media.				
2–4 months		2–4 months	4–6 months	6+ months	<10 business days	1–2 months	2–5 months	
Supplement screen	Medium enhancement	Feed strategy development	Media library panel screen	Full medium design	Full medium design and feed development	Rapid media production*	GMP pilot production	GMP custom media production

\*Non-GMP pilot production; additional time needed for shipping.



# Media enrichment services



# Media enrichment services capabilities

- For customers seeking to enhance the performance or reduce the variability of existing media.
- Our full suite of media enrichment services from a quick supplement screen to an intensive feed strategy development — can help achieve desired yield and performance.





# Delivering results in predictable time frames

#### Media enrichment services Month 2–4 Month 1 Project scoping/ Baseline study Optimization studies technical transfer 2 3 Baseline study data review Project initiation meeting Project completion meeting meeting Review data from project Confirm transfer of Review data from baseline documentation and materials Review project conclusions study to confirm technical and recommendations • Review project scope and work transfer plan Provide summary report · Go/no-go decision



#### The objective

A customer wanted to identify a final clone in an animal origin-free medium in a specific time frame.

#### Our approach

After the initial transfer, conducted base medium screenings and enhancement with peptones for three candidate clones.

#### The results

Within the desired timeframe set by the customer, identified an animal origin-free base medium for each clone, resulting in higher antibody yields.





# Media design services



## Media design services capabilities

- Ideal for customers looking to build new media specific to their cell lines and optimized to their application.
- Our media design services, including a media library panel screen and full medium design, provide customized solutions while keeping time, budget and quality in mind.





# Delivering results in predictable time frames





# Base medium and feed design





### The objective

A customer requested a base medium to improve cell line production and achieve an acceptable antibody charge variant profile to match an innovator drug.

### Our approach

Conducted base media screening and enhancement to identify media which would provide the desired production and antibody charge variant profile.

#### The results

Developed three new media, which increased production by greater than 50% with a charge variant profile comparable to the innovator drug.



#### Media Enhancement Study



#### The objective

A customer was evaluating CHO cells for their process and needed a new base medium and feed strategy for the evaluation.

#### Our approach

Our experts conducted a library media screen, followed by media enhancement and feed strategy development using peptones and peptone blends.

#### The results

Using our proven methodology, Gibco identified a new base medium and feed strategy which achieved a greater than five-fold increase in the antibody production in the customer's CHO system.





# Media bioproduction services



# Media bioproduction services capabilities

- Services for customers interested in manufacturing bench- and production-scale media.
- Our media manufacturing services are tailored to meet the needs of your production process.





\*Non-GMP pilot production. Additional time for shipping.

#### Our rapid, flexible and scalable media

production solution is designed specifically to meet your process development and research budgets and timelines. This developmental medium production service delivers, within 10 business days of custom specification confirmation, custom scalable lots of liquid and/or powder media.

Available formats	Volume	Packaging	Container sizes
Liquid medium	1 L–200 L	Bag and bottles	1 L flexible, 20 L flexible, 100 mL, 500 mL PET, 1 L PET
Powder medium	1 kg–60 kg	Bottles and pails	100 g, 500 g, 1 kg, 5 kg, 10 kg

Non-GMP pilot production. Additional time for shipping. Custom sizes are available upon request.





# Let's move forward together

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