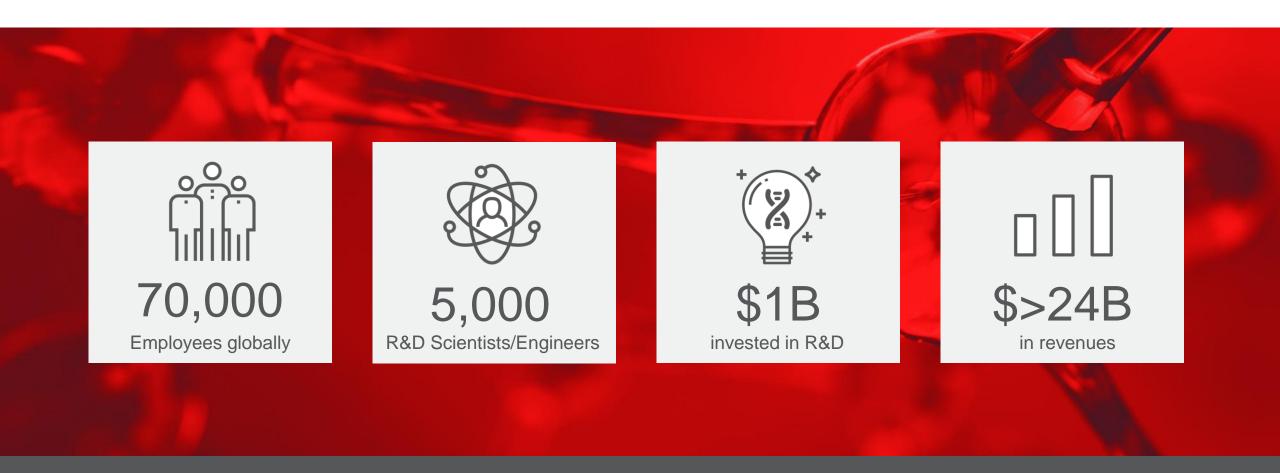


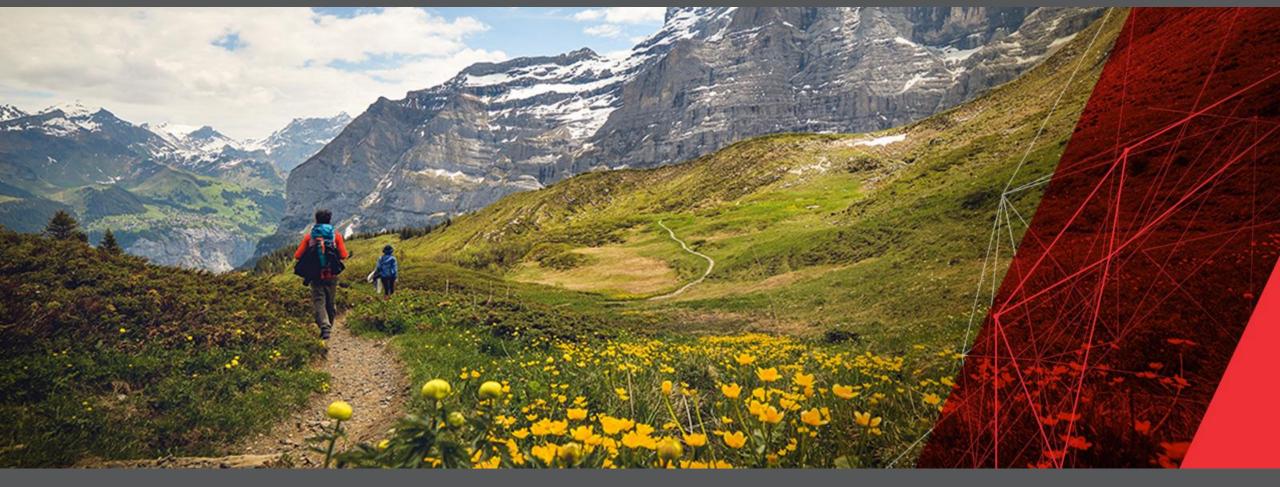
Thermo Fisher SCIENTIFIC

**Peptone Preview Series Products** 



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



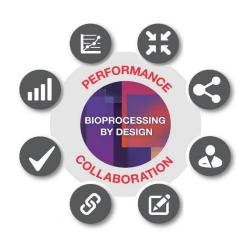
We offer products and solutions that enable customers to push the boundaries of innovation

- Customer focus
- Leading portfolio
- Scale of capabilities

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

#### **Life Sciences Solutions**

- Genetic Sciences
- Clinical Next Generation Sequencing
- Biosciences
- Laboratory Products
- Laboratory Chemicals
- BioProduction
  - gibco™
  - Bacto<sup>™</sup> and Difco<sup>™</sup>





#### **Analytical Instruments**



- Chemical Analysis
- Chromatography and Mass Spectrometry
- Materials and Structural Analysis
- Instrument and Enterprise Services

### **Specialty Diagnostics**



- Microbiology
- Anatomical Pathology
- · Clinical Diagnostics
- ImmunoDiagnostics
- · Healthcare Market
- Transplant Diagnostics

#### **Customer Channels**



- Research and Safety Market Division, North America
- Research and Safety Market Division, Europe

#### **Pharma Services**



- Clinical Trials
- Drug Development and Commercial Divisions, North America and Europe
- Active Pharmaceutical Ingredient Division, North America & Europe
- · Biologics Division
- · Softgels Division



# Providing New and Innovative Solutions



**Difco and Bacto supplements are part of the Gibco 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 innovation and design to enhance culture media and supplements.



To date, our peptones and supplements are used in the manufacture of more than **150 biopharmaceutical drugs** in the human and animal health markets with more in development.



We deliver innovation and product consistency that meets the highquality standards our bioproduction customers expect, which exceeds nutraceutical and food grade product standards.





15 blockbuster drugs

### Animal Origin-Free Peptones

The Gibco line of animal origin—free peptones and supplements offer a range of optimized nutritional choices to embrace production in both microbial fermentation and mammalian cell culture applications.

#### Mammalian cell lines







Hybridoma NS0



MDCK MDBK Vero



HEK293



Sf9 Sf21



Others

### Microbial cell lines



Mycoplasma, Escherichia, Streptococcus, Erysipelothrix, Clostridium, Salmonella, and others

### Gibco product information

**Bacto Yeast Extract** 

**Yeast Extract** 

Bacto Yeast Extract, Technical

Difco Yeast Extract, UF

Difco Yeast Extract, LD

Bacto TC Yeastolate

Difco TC Yeastolate, UF

**Bacto Malt Extract** 

Phytone Peptone

Difco Phytone Supplement, UF

Difco Soytone

**Bacto Soytone** 

Soy Peptone 100

Wheat Peptone 100 UF

Cotton Peptone 200 UF

**Bacto Malt Extract** 

### **Animal Origin Peptones**

Animal origin peptones provide a rich source of nutrients, helping to increase yield while maintaining protein quality. The Gibco portfolio offers a variety of animal origin supplements, from meat peptones to casein and whey peptones.

### Microbial usage



Mycoplasma, Clostridium, Erysipelothrix, Streptococcus, Pasturella, Bordetella, Borrelia, Haemophilus, Pseudomonas, Vibrio, and others

### Mammalian usage









### **Gibco product information**

Beef Extract Powder	Bacto Tryptose	Bacto Peptone	Bacto Proteose Peptone No. 3
Bacto Beef Extract, Desiccated	Acidicase Peptone	Polypeptone Peptone	BiTek Proteose Peptone No. 3
Difco Beef Extract	Bacto Casamino Acids	Bacto Proteose Peptone	Bacto Proteose Peptone No. 4
Bacto Casamino Acids, Technical	Gelysate Peptone	BiTek Proteose Peptone	Bacto TC Lactalbumin Hydrolysate
Bacto Neopeptone	Biosate Peptone	Bacto Proteose Peptone No. 2	Difco Casamino Acids, Vitamin Assay
Difco Casein Digest	Bacto Casitone	Trypticase Peptone	Bacto/BiTek Tryptone

# Gibco™ Peptone Starter Paks



# Proven Supplements for BioProduction







Gibco™ Starter Pak No. 1\*

Human and Animal Health Applications

Gibco™ Starter Pak No. 2\*

> Vaccine Production

Gibco™ Starter Pak No. 3\*

Animal Origin-Free Peptones for Vaccine Production

<sup>\*</sup>Samples are non-GMP and for evaluation use only. All samples are available as GMP finished goods.

# Peptones for Human and Animal Health Applications



Gibco Starter Pak No. 1\*

- A combination of animal origin-free yeast and soy based peptones with an established history of use in vaccines, monoclonal antibodies and recombinant protein production
- The Pak includes five 100g samples:

  Difco™ Yeast Extract UF

  Bacto™ TC Yeastolate

  Difco™ TC Yeastolate, UF

  Difco™ Phytone™, UF

  Bacto™ Yeast Extract, Technical

\*Samples are non-GMP and for evaluation use only. All samples are available as GMP finished goods.

# Peptones for Vaccine Production







# Gibco Starter Pak No. 2\*

- Animal origin-free and animal origin peptones offering many of the essential nutrients needed to produce human and animal vaccines
- The Pak includes six 100g samples:
   Bacto<sup>™</sup> Yeast Extract
   Difco<sup>™</sup> Soytone
   Phytone<sup>™</sup> Peptone
   Bacto<sup>™</sup> Proteose Peptone No. 2
   Bacto<sup>™</sup> Proteose Peptone No. 3
   Bacto<sup>™</sup> Casamino Acids

\*Samples are non-GMP and for evaluation use only. All samples are available as GMP finished goods.

# Animal Origin-Free Peptones for Vaccine Production



Gibco Starter Pak No. 3\*

 These products are ideal for processes in which an animal origin-free medium is preferred without the requirements for ultra-filtration The Pak includes six 100g samples:
 Bacto™ Malt Extract
 Bacto™ Yeast Extract
 Gibco Yeast Extract
 Bacto™ TC Yeastolate
 Phytone™ Peptone
 Difco™ Soytone

\*Samples are non-GMP and for evaluation use only. All samples are available as GMP finished goods.

# Gibco™ Peptone Preview Pak



### Gibco Peptone Preview Pak Supplements

#### Gibco Preview Pak\*

New, animal origin-free peptones with unique nutritional profiles, suitable for mammalian and microbial applications

### Wheat Peptone 100 UF<sub>†</sub>

Ultra-filtered supplement that provide a good source of glutamine, which makes it ideal for mammalian cell culture applications

### **Cotton Peptone 100 UF**

Rich in nucleosides, digested to enhance peptide content and processed to provide higher vitamin concentrations, which can help to maintain performance and titers.

### Cotton Peptone 200 UF†

Ultra-filtered, rich in nucleoside content and processed to enhance carbohydrate concentrations.

### Soy Peptone 100†

A highly digested soy protein peptone, high in nucleosides, free amino acid content, vitamins and carbohydrates.

### **Yeast Peptone 100**

Versatile supplement that increases growth and production characteristics, designed to enhance content of vitamins and other key nutritional components found in yeast.



### **Gibco Peptone Preview Pak\***

Wheat Peptone 100 UF

Cotton Peptone 100 UF

Cotton Peptone 200 UF

Soy Peptone 100

Yeast Peptone 100



<sup>\*</sup>Preview Pak samples are non-GMP and for evaluation use only.

<sup>†</sup> Available as GMP finished good

# Summary

# Gibco Peptones in bioprocessing

 Deliver reliable, consistent performance when partnering with a vendor who specializes in the needs of the biopharmaceutical industry.

Well established, **proven supplements** for enhancing bioprocessing applications, through a variety of mechanisms ranging from nutritional enrichment to suppression of cell death.

Peptones continue to be widely used for the production of today's blockbuster biotherapeutic drugs and the development of the next generation of biopharmaceutical innovations.

Animal origin-free & antibiotic free facility Miami, FL

# Begin the Conversation With Industry Proven Gibco Peptones

Product	Cat No.	Product	Cat No.	Product	Cat No.	Product	Cat No.
Starter Pak No. 1*	215366	Starter Pak No. 2*	215367	Starter Pak No. 3*	215368	Preview Pak†	215379
Difco™ Yeast Extract, UF Bacto™ TC Yeastolate Difco™ TC Yeastolate, UF Difco™ Phytone™ Suppleme Bacto™ Yeast Extract, Techn		Bacto™ Yeast Extract Difco™ Soytone Phytone™ Peptone Bacto™ Proteose Peptone No. Bacto™ Proteose Peptone No. Bacto™ Casamino Acids		Bacto™ Malt Extract Bacto™ Yeast Extract Gibco Yeast Extract Bacto™ TC Yeastolate Phytone™ Peptone Difco™ Soytone		Wheat Peptone 100 UF Cotton Peptone 100 UF Cotton Peptone 200 UF Soy Peptone 100 Yeast Peptone 100	



†Gibco Peptone Preview Pak supplements are non-GMP and for evaluation use only. Some components are available as cGMP finished goods.



<sup>\*</sup>Gibco Peptone Starter Pak supplements are non-GMP and for evaluation use only. All samples are commercially available as finished goods manufactured to cGMP standards.



# Let's move forward together

Thermo Fisher S C I E N T I F I C

For Research Use or Further Manufacturing. Not for diagnostic use or direct administration into humans or animals. ©2020 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. DIFCO is a trademark of Becton Dickinson and Company and is used under license.