



Thermo Scientific Laboratory Consumables Catalog

Bioproduction | Cell Culture | Diagnostics
Filtration | General Labware | IVF
Microplates for Drug Discovery | Packaging
Sample Storage

Quality, Choice
and Innovation
for your applications

Thermo
SCIENTIFIC

cell culture | 90-191

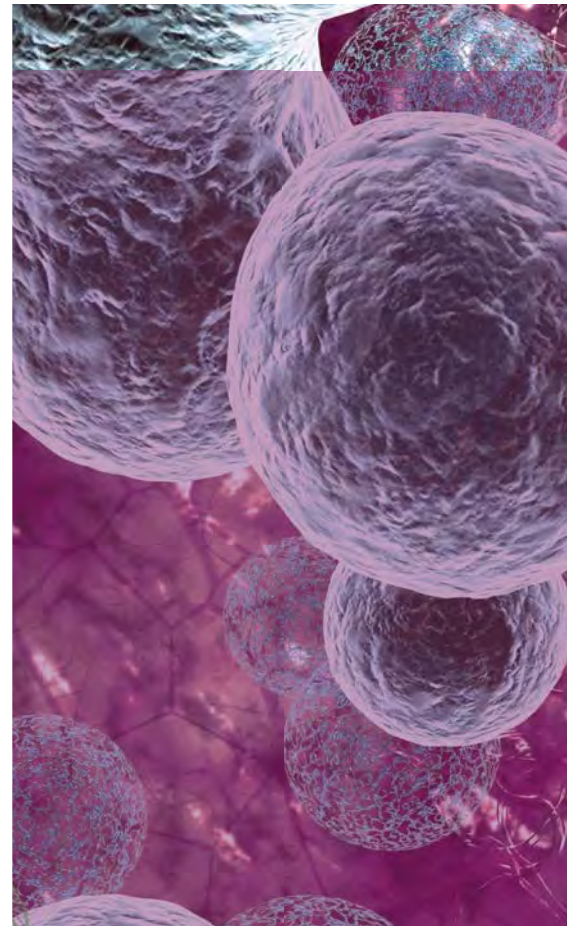
Elevating quality and performance in cell culture.

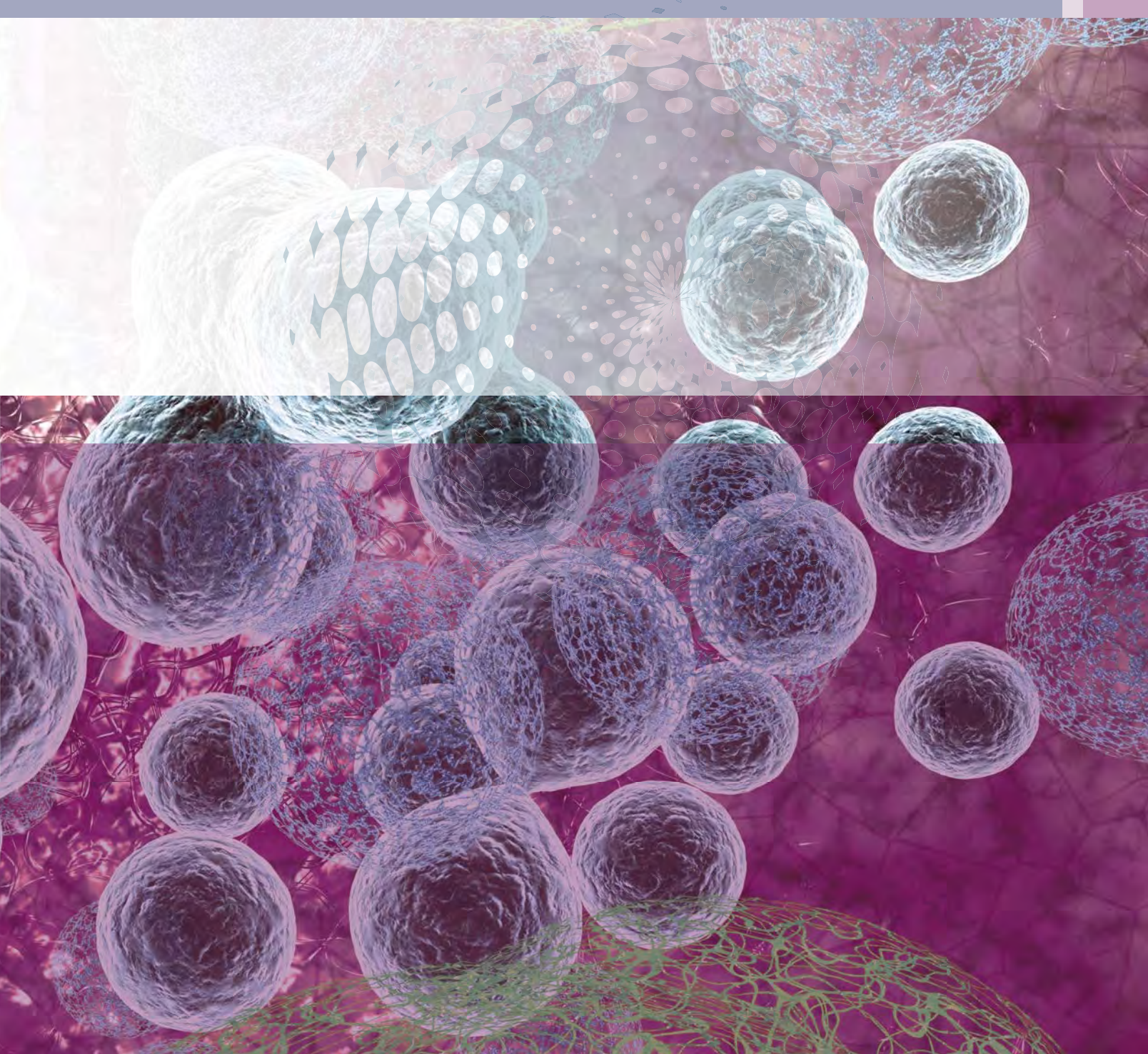
Distinction is our legacy. For more than 50 years, Thermo Scientific cell culture products have been a cornerstone of quality and dependability among researchers and scientists worldwide.

Today, our cell culture portfolio is built on a framework of innovative surface technologies and formats that achieve optimal consistency and growth across a variety of cell types – representing traditional as well as stem cell lines and IVF applications. Our portfolio also includes filtration products, with relevant membrane offerings to collectively optimize sterility and safety in your process. Our products are further enhanced by offerings that assist in the rigorous requirements of fluid transfer – a challenge met by the precision of our serological pipettes and conical tubes.

To serve the expanding needs of cell culture research, Thermo Scientific HyClone sera and media set the standard for quality, purity and lot-to-lot consistency. Our manufacturing processes are validated to ensure compliance with cGMP, ISO 9001:2000, ISO 13485:2003 and our own stringent quality standards.

- ▶ For more information about Thermo Scientific cell culture solutions visit:
www.thermoscientific.com/cellculture





consistent growth



Optimizing Your Results Across Every Stage of Cell Culture

Cell culture research is becoming more challenging everyday, making the requirement for superior product quality and performance across each stage of cell culture more critical than ever.

Thermo Fisher Scientific offers a complete portfolio of cell culture products and solutions that lead the industry worldwide in quality, choice and innovation – so researchers can advance their work with complete confidence.

Thermo Scientific Products –
meeting the challenges of science and industry

sera and media

Thermo Scientific HyClone Sera and Media

For more than 40 years, we have been steadfast in our commitment to product innovation, quality and the advancement of science through the support of cell culture across academia, research and bioprocessing. As a leading global manufacturer of sera, media and other cell culture reagents, HyClone™ products enable advancements in cell culture that continually expand knowledge and research advancement worldwide.



For more product information, go to:
www.thermoscientific.com/hyclone

classical liquid media

Since our beginning almost 50 years ago, we have demonstrated our commitment to the advancement of science by becoming a premier supplier of products to support cell culture. While we have achieved dramatic growth in the supply of large-scale production volumes of media for industry, our roots are in laboratory research and academia, and we remain committed to providing superior, innovative products for these applications.

Our extensive line of high-quality Classical Media formulations is offered in convenient packaging configurations. All Classical Media are system-tested with Thermo Scientific HyClone sera to ensure product efficacy and homogeneity.

From production to quality control and final product packaging, we deliver the best in high quality media. Our Classical Media products comprise the most commonly-used formulations used in today's research market. Variations of these standard formulations are available on a made-to-order basis.

All of our media manufacturing facilities and state-of-the-art milling, formulating, filtration and aseptic filling processes are validated to ensure compliance with cGMP, ISO 9001:2000, ISO 13485:2003, and our own stringent quality standards. Vertical integration of these manufacturing processes, such as hydration of media using milled formulations and supplier inspection and certification programs helps ensure product efficacy, uniformity and consistency. All products are formulated, milled, and blended into complete powdered media according to written, approved specifications.

These bulk formulations are then either packaged as ready-to-hydrate finished powders, or transferred to the media hydration facility for hydration and sterile filtration into bottles. Other capabilities and value-added features include:

- Hydration using our WFI Quality Water system for unsurpassed quality
- Lot sizes of up to 2,000 L in our standard 500 mL and 1 L bottles
- 0.1 µm filtration for all standard products

► Thermo Scientific HyClone Basal Media Eagle (BME) with Earle's Balanced Salt Solution

The simplest media for cell culture.

Basal Media Eagle (BME), originally developed by Harry Eagle for HeLa cells and mouse fibroblasts, was used to discover the minimum requirements for *in vitro* cell growth. BME has since been used for many other mammalian cell types. BME also serves as the base for many other types of classical media including Minimal Essential Medium (MEM) and Dulbecco's Modified Eagle's Medium (DMEM). BME contains eight B vitamins, the ten essential amino acids, plus cystine, tyrosine, and glutamine.

details

- Contains 5.6 mM Glucose, 2.0 mM L-Glutamine and Phenol Red
- Available as a liquid in multiple sizes
- Produced with WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Basal Media Eagle (BME) with Earle's Balanced Salt Solution

Cat. No.	Description	Format	Size
SH30157.01	BME/EBSS	Liquid	500 mL
SH30157.02	BME/EBSS	Liquid	1000 mL

► Thermo Scientific HyClone Dulbecco's Modified Eagles Medium (DMEM), High Glucose



Multiple variations of a classical formulation for a wide variety of cell types.

DMEM, High Glucose is a widely used classical media suitable for the culturing of many immortalized cell lines from humans, monkeys, hamsters, rats, mice, chicken and fish. It has also been used to successfully culture primary fibroblasts, neurons, glial cells, HUVECs and smooth muscle cells. DMEM contains four times more amino acids, vitamins and other supplementary components than Basal Medium Eagle (BME), the base media from which DMEM was derived. As DMEM contains no growth-promoting agents or proteins, supplementation with FBS is recommended for optimal performance. DMEM is one of the most widely modified media types.

details

- Contains 25.0 mM Glucose
- Available with or without L-glutamine, Sodium Pyruvate, Phenol Red and HEPES
- Multiple formats available, including a reduced serum version and low osmo for stem cell culture
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Dulbecco's Modified Eagles Medium (DMEM), High Glucose

Cat. No.	Description	L-Glutamine	Sodium Pyruvate	HEPES	Phenol Red	Format	Size
SH30022.01	DMEM High Glucose	4.0 mM			Y	Liquid	500 mL
SH30022.02	DMEM High Glucose	4.0 mM			Y	Liquid	1000 mL
SH30022.FS	DMEM High Glucose	4.0 mM			Y	Liquid	6 X 500 mL
SH30022.LS	DMEM High Glucose	4.0 mM			Y	Liquid	6 X 1000 mL
SH30003.01	DMEM High Glucose	4.0 mM			Y	Powder	10 X 1 L
SH30003.02	DMEM High Glucose	4.0 mM			Y	Powder	2 X 5 L
SH30003.03	DMEM High Glucose	4.0 mM			Y	Powder	1 X 10 L
SH30284.01	DMEM High Glucose	4.0 mM				Liquid	500 mL
SH30284.02	DMEM High Glucose	4.0 mM				Liquid	1000 mL
SH30211.01	DMEM High Glucose	4.0 mM				Powder	1 X 10 L
SH30211.05	DMEM High Glucose	4.0 mM				Powder	2 X 5 L
SH30243.01	DMEM High Glucose	4.0 mM	1.0 mM		Y	Liquid	500 mL
SH30243.02	DMEM High Glucose	4.0 mM	1.0 mM		Y	Liquid	1000 mL
SH30243.FS	DMEM High Glucose	4.0 mM	1.0 mM		Y	Liquid	6 X 500 mL
SH30243.LS	DMEM High Glucose	4.0 mM	1.0 mM		Y	Liquid	6 X 1000 mL
SH30045.02	DMEM High Glucose	4.0 mM	1.0 mM		Y	Powder	2 X 5 L
SH30045.03	DMEM High Glucose	4.0 mM	1.0 mM		Y	Powder	1 X 10 L
SH30287.01	DMEM High Glucose	4.0 mM	1.0 mM			Powder	2 X 5 L
SH30287.02	DMEM High Glucose	4.0 mM	1.0 mM			Powder	1 X 10 L
SH30249.01	DMEM High Glucose	4.0 mM		25.0 mM	Y	Liquid	500 mL
SH30249.02	DMEM High Glucose	4.0 mM		25.0 mM	Y	Liquid	1000 mL

► Thermo Scientific HyClone Dulbecco's Modified Eagles Medium (DMEM), High Glucose, continued

Dulbecco's Modified Eagles Medium (DMEM), High Glucose, continued

Cat. No.	Description	L-Glutamine	Sodium Pyruvate	HEPES	Phenol Red	Format	Size
SH30081.01	DMEM High Glucose				Y	Liquid	500 mL
SH30081.02	DMEM High Glucose				Y	Liquid	1000 mL
SH30081.FS	DMEM High Glucose				Y	Liquid	6 X 500 mL
SH30081.LS	DMEM High Glucose				Y	Liquid	6 X 1000 mL
SH30053.02	DMEM High Glucose				Y	Powder	2 X 5 L
SH30053.03	DMEM High Glucose				Y	Powder	1 X 10 L
SH30285.01	DMEM High Glucose		1.0 mM		Y	Liquid	500 mL
SH30285.02	DMEM High Glucose		1.0 mM		Y	Liquid	1000 mL
SH30285.FS	DMEM High Glucose		1.0 mM		Y	Liquid	6 X 500 mL
SH30285.LS	DMEM High Glucose		1.0 mM		Y	Liquid	6 X 1000 mL
SH30563.01	DMEM High Glucose		1.0 mM	25.0 mM	Y	Liquid	500 mL
SH30563.02	DMEM High Glucose		1.0 mM	25.0 mM	Y	Liquid	1000 mL
SH30348.02	DMEM High Glucose, Filter Friendly	4.0 mM			Y	Powder	2 X 5 L
SH30348.03	DMEM High Glucose, Filter Friendly	4.0 mM			Y	Powder	1 X 10 L
SH30262.01	DMEM High Glucose, without Calcium or Magnesium				Y	Liquid	500 mL
SH30262.02	DMEM High Glucose, without Calcium or Magnesium				Y	Liquid	1000 mL
SH30346.01	DMEM High Glucose, without Calcium or Magnesium				Y	Powder	2 X 5 L
SH30346.02	DMEM High Glucose, without Calcium or Magnesium				Y	Powder	1 X 10 L
SH30606.01	DMEM High Glucose, without Methionine, or Cystine		1.0 mM		Y	Liquid	500 mL
SH30606.02	DMEM High Glucose, without Methionine, or Cystine		1.0 mM		Y	Liquid	1000 mL
SH30634.01	DMEM High Glucose, without Phosphate	4.0 mM			Y	Liquid	500 mL
SH30607.01	DMEM High Glucose, without Phosphate		1.0 mM		Y	Liquid	500 mL
SH30604.02	DMEM High Glucose, Modified		1.0 mM			Liquid	1000 mL
SH30604.01	DMEM High Glucose, Modified		1.0 mM			Liquid	500 mL
SH30585.01	DMEM High Glucose, Modified					Liquid	500 mL
SH30585.02	DMEM High Glucose, Modified					Liquid	1000 mL
SH30565.01	DMEM-RS, (Reduced Serum DMEM High Glucose)	4.0 mM		25.0 mM	Y	Liquid	500 mL
SH30565.02	DMEM-RS, (Reduced Serum DMEM High Glucose)	4.0 mM		25.0 mM	Y	Liquid	1000 mL
SH30824.01	AdvanceSTEM DMEM4SC, DMEM High Glucose for stem cells			25.0 mM	Y	Liquid	500 mL
SH30824.02	AdvanceSTEM DMEM4SC, DMEM High Glucose for stem cells			25.0 mM	Y	Liquid	1000 mL
SH30870.01	AdvanceSTEM Low Osmo DMEM		1.0 mM	25.0 mM	Y	Liquid	500 mL
SH30870.02	AdvanceSTEM Low Osmo DMEM		1.0 mM	25.0 mM	Y	Liquid	1000 mL

► **Easily find the most suitable media and sera for your cell culture applications. Learn more about our new mobile app at: thermoscientific.com/mediaseraapp**

► Thermo Scientific HyClone Dulbecco's Modified Eagles Medium (DMEM), Low Glucose



Low Glucose version of DMEM for suspension cell culture.

DMEM Low Glucose was the original modification of Basal Medium Eagle (BME) used to grow mouse embryonic cells. DMEM, Low Glucose is suitable for the culturing of many immortalized cell lines from humans, monkeys, hamsters, rats, mice, chicken and fish. DMEM contains four times more amino acids, vitamins and other supplementary components than Basal Medium Eagle (BME), the base media from which DMEM was derived. As DMEM contains no growth-promoting agents or proteins, supplementation with FBS is recommended for optimal performance.

details

- Contains 5.6 mM Glucose and 4.0 mM L-Glutamine
- Available with or without Phenol Red
- Available as a liquid or powder in multiple sizes
- Produced with WFI quality water
- 0.1 μ m sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Dulbecco's Modified Eagles Medium (DMEM), Low Glucose

Cat. No.	Description	Phenol Red	Format	Size
SH30021.01	DMEM Low Glucose	Y	Liquid	500 mL
SH30021.02	DMEM Low Glucose	Y	Liquid	1000 mL
SH30021.FS	DMEM Low Glucose	Y	Liquid	6 X 500 mL
SH30002.01	DMEM Low Glucose	Y	Powder	10 X 1 L
SH30002.02	DMEM Low Glucose	Y	Powder	2 X 5 L
SH30002.03	DMEM Low Glucose	Y	Powder	1 X 10 L
SH30044.01	DMEM Low Glucose		Powder	10 X 1 L
SH30044.02	DMEM Low Glucose		Powder	2 X 5 L
SH30044.03	DMEM Low Glucose		Powder	1 X 10 L

► Thermo Scientific HyClone DMEM / F12 1:1

Combining the best from two popular media.

DMEM / F12 is an equal parts blend of DMEM and Ham's F12 media that is widely used for culturing many different mammalian cells including MDCK, Glial cells, fibroblasts, and endothelial cells. This formulation combines the high concentration of glucose, amino acids and vitamins from DMEM with the wide variety of other components available in Ham's F-12.

details

- Contains 17.5 mM Glucose and 0.5 mM Sodium Pyruvate
- Available with or without L-Glutamine, Phenol Red or HEPES
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

DMEM / F12 1:1

Cat. No.	Description	L-Glutamine	HEPES	Phenol Red	Format	Size
SH30023.01	DMEM/F12	2.5 mM	15.0 mM	Y	Liquid	500 mL
SH30023.02	DMEM/F12	2.5 mM	15.0 mM	Y	Liquid	1000 mL
SH30023.FS	DMEM/F12	2.5 mM	15.0 mM	Y	Liquid	6 X 500 mL
SH30004.01	DMEM/F12	2.5 mM	15.0 mM	Y	Powder	10 X 1 L
SH30004.02	DMEM/F12	2.5 mM	15.0 mM	Y	Powder	2 X 5 L
SH30004.03	DMEM/F12	2.5 mM	15.0 mM	Y	Powder	1 X 10 L
SH30261.01	DMEM/F12	2.5 mM	15.0 mM	Y	Liquid	500 mL
SH30261.02	DMEM/F12	2.5 mM	15.0 mM	Y	Liquid	1000 mL
SH30271.01	DMEM/F12	2.5 mM		Y	Liquid	500 mL
SH30271.02	DMEM/F12	2.5 mM		Y	Liquid	1000 mL
SH30271.FS	DMEM/F12	2.5 mM		Y	Liquid	6 X 500 mL
SH30069.02	DMEM/F12	2.5 mM		Y	Powder	2 X 5 L
SH30069.03	DMEM/F12	2.5 mM		Y	Powder	2 X 5 L
SH30272.01	DMEM/F12	2.5 mM			Liquid	500 mL
SH30272.02	DMEM/F12	2.5 mM			Liquid	1000 mL
SH30126.01	DMEM/F12		15.0 mM	Y	Liquid	500 mL
SH30126.02	DMEM/F12		15.0 mM	Y	Liquid	1000 mL
SH30126.FS	DMEM/F12		15.0 mM	Y	Liquid	6 X 500 mL



► Thermo Scientific HyClone Ham's F-10 Basal Media

Serum-free culture of CHO cells.

Ham's F-10 was designed for use with Chinese Hamster Ovary (CHO) cells, and has been shown to support the growth of human diploid cells, white blood cells, and primary explants from rat, rabbit, or chicken tissues. This classical media can be used for serum-free growth of some cell lines including CHO cells. Serum supplementation may or may not be necessary depending on the type of cell being cultured. Ham's F-10 contains a wide variety of components, including zinc, hypoxanthine, and thymidine and is buffered with sodium bicarbonate.

details

- Contains 6.1 mM Glucose, 1.0 mM L-Glutamine, 1.0 mM Sodium Pyruvate and Phenol Red
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Ham's F-10 Basal Media

Cat. No.	Description	Format	Size
SH30025.01	Ham's F10	Liquid	500 mL
SH30025.02	Ham's F10	Liquid	1000 mL
SH30009.01	Ham's F10	Powder	10 X 1 L
SH30009.02	Ham's F10	Powder	2 X 5 L
SH30009.03	Ham's F10	Powder	1 X 10 L

► Thermo Scientific HyClone Ham's F-12 Basal Media

Improved formulation for CHO cells.

Ham's F-12 media was originally derived by modifying Hams' F-10 to include increased concentrations of choline, inositol, putrescine, and several amino acids. It was developed specifically for serum free culturing of Chinese Hamster Ovary (CHO) cells and has also been used with supplementation to grow chondrocytes, primary rat hepatocytes, rat prostate epithelial cells, carcinoma cells, rat skeletal myoblasts and rat, rabbit, and chicken embryos.

details

- Contains Phenol Red
- Available with or without L-Glutamine
- Available in multiple sizes and configurations of liquid or powder
- Available with Kaighn's Modification and in a reduced serum version
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Ham's F-12 Basal Media

Cat. No.	Description	Glucose	L-Glutamine	Sodium Pyruvate	Format	Size
SH30026.01	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Liquid	500 mL
SH30026.02	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Liquid	1000 mL
SH30026.FS	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Liquid	6 X 500 mL
SH30010.01	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Powder	10 X 1 L
SH30010.02	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Powder	2 X 5 L
SH30010.03	Ham's F12	10.0 mM	1.0 mM	1.0 mM	Powder	1 X 10 L
SH30056.02	Ham's F12	10.0 mM		1.0 mM	Powder	2 X 5 L
SH30056.03	Ham's F12	10.0 mM		1.0 mM	Powder	1 X 10 L
SH30526.01	Ham's F12, Kaighn's Modification	7.0 mM	2.0 mM	2.0 mM	Liquid	500 mL
SH30526.02	Ham's F12, Kaighn's Modification	7.0 mM	2.0 mM	2.0 mM	Liquid	1000 mL
SH30623.01	Ham's F12-RS (Reduced Serum Media)	10.0 mM	1.0 mM	1.0 mM	Liquid	500 mL
SH30623.02	Ham's F12-RS (Reduced Serum Media)	10.0 mM	1.0 mM	1.0 mM	Liquid	1000 mL

► Thermo Scientific HyClone Iscove's Modified Dulbecco's Media (IMDM)

Nutritionally designed for fast growing cells.

IMDM is an enriched modification of Dulbecco's Modified Eagle's Medium (DMEM) that contains selenium, additional amino acids and vitamins, sodium pyruvate, HEPES buffer, and potassium nitrate instead of ferric nitrate. IMDM was designed to support rapidly proliferating cultures with high cell density. Cell lines grown successfully with IMDM include Jurkat, COS-7, and lines derived from murine B lymphocytes, hematopoietic tissue from bone marrow, B cells stimulated with lipopolysaccharide, T lymphocytes, erythrocytes and macrophages and a variety of hybrid cells. IMDM is generally used with serum supplementation. With some cell types, IMDM can be used serum free when supplemented with albumin and transferrin.

details

- Contains 1.0 mM Sodium Pyruvate, 25 mM HEPES and Phenol Red
- Available without Alpha-Thioglycerol
- Stem cell modified option osmotically balanced for stem cell culture
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Iscove's Modified Dulbecco's Media (IMDM)

Cat. No.	Description	Glucose	L-Glutamine	Format	Size
SH30259.01	IMDM	25.0 mM		Liquid	500 mL
SH30259.02	IMDM	25.0 mM		Liquid	1000 mL
SH30380.02	IMDM	25.0 mM		Powder	2 X 5 L
SH30380.03	IMDM	25.0 mM		Powder	1 X 10 L
SH30228.01	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Liquid	500 mL
SH30228.02	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Liquid	1000 mL
SH30228.FS	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Liquid	6 X 500 mL
SH30005.01	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Powder	10 X 1 L
SH30005.02	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Powder	2 X 5 L
SH30005.03	IMDM, without Alpha-Thioglycerol	25.0 mM	4.0 mM	Powder	1 X 10 L
SH30302.02	IMDM, without Alpha-Thioglycerol, ADCF	25.0 mM	4.0 mM	Powder	2 X 5 L
SH30302.03	IMDM, without Alpha-Thioglycerol, ADCF	25.0 mM	4.0 mM	Powder	1 X 10 L
SH30822.01	AdvanceSTEM IMDM4SC, (IMDM for Stem Cells)	27.74 mM		Liquid	500 mL
SH30822.02	AdvanceSTEM IMDM4SC, (IMDM for Stem Cells)	27.74 mM		Liquid	1000 mL

► Thermo Scientific HyClone Leibovitz's L-15

Designed for culture without CO₂ equilibration.

Leibovitz's L-15 medium was originally developed with a phosphate and free base amino acid buffering system for use in environments without carbon dioxide equilibration. Leibovitz L-15 has been used for the propagation of HEp-2, monkey kidney cells and primary explants of embryonic and adult human tissue. Leibovitz's medium is typically supplemented with serum.

details

- Contains 5.0 mM Galactose, 5.0 mM Sodium Pyruvate, 2.1 mM L- Glutamine and Phenol Red
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Leibovitz's L-15

Cat. No.	Description	Format	Size
SH30525.01	Leibovitz L-15	Liquid	500 mL
SH30525.02	Leibovitz L-15	Liquid	1000 mL
SH30048.01	Leibovitz L-15	Powder	10 X 1 L
SH30048.02	Leibovitz L-15	Powder	2 X 5 L
SH30048.03	Leibovitz L-15	Powder	1 X 10 L

► Thermo Scientific HyClone Medium 199 (M199)

One of the first media developed and still one of the best.

M199 has broad utility across multiple species and is often used for vaccine production in non-transformed cells. Originally developed for culturing chick embryo fibroblasts, it also supports the growth of primary pancreatic explants, and lens tissue. Medium 199 contains some unique components in comparison with other classical media, including adenine, adenosine, hypoxanthine, thymine, and additional vitamins. Serum supplementation is recommended when using this media for long-term culturing.

details

- Contains 5.6 mM Glucose, and 0.7 mM L- Glutamine
- Available with or without Phenol Red and L-amino acids
- With Earle's salts for use in a CO₂ incubator, or with Hank's salts for use without CO₂
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Medium 199 (M199)

Cat. No.	Description	Phenol Red?	Format	Size
SH30253.01	M199 with Earle's Balanced Salt Solution (EBSS)	Y	Liquid	500 mL
SH30253.02	M199 with Earle's Balanced Salt Solution (EBSS)	Y	Liquid	1000 mL
SH30253.FS	M199 with Earle's Balanced Salt Solution (EBSS)	Y	Liquid	6 X 500 mL
SH30254.01	M199 with Earle's Balanced Salt Solution (EBSS)	N	Powder	2 X 5 L
SH30254.02	M199 with Earle's Balanced Salt Solution (EBSS)	N	Powder	1 X 10 L
SH30351.01	M199 with Earle's Balanced Salt Solution (EBSS) Filter Friendly	Y	Powder	1 X 10 L
SH30297.01	M199 with Earle's Balanced Salt Solution (EBSS), with L-Amino Acids	Y	Powder	10 X 1 L
SH30297.02	M199 with Earle's Balanced Salt Solution (EBSS), with L-Amino Acids	Y	Powder	2 X 5 L
SH30297.03	M199 with Earle's Balanced Salt Solution (EBSS), with L-Amino Acids	Y	Powder	1 X 10 L
SH30233.01	M199 with Hank's Balanced Salt Solution (HBSS)	Y	Liquid	100 mL
SH30233.02	M199 with Hank's Balanced Salt Solution (HBSS)	Y	Liquid	500 mL
SH30233.03	M199 with Hank's Balanced Salt Solution (HBSS)	Y	Liquid	1000 mL
SH30223.04	M199 with Hank's Balanced Salt Solution (HBSS)	Y	Powder	1 X 10 L
SH30330.01	M199 with Hank's Balanced Salt Solution (HBSS), with L-Amino Acids	Y	Liquid	500 mL
SH30330.02	M199 with Hank's Balanced Salt Solution (HBSS), with L-Amino Acids	Y	Liquid	1000 mL

► Thermo Scientific HyClone McCoy's 5A

Media with Bacto-peptone as a nitrogen source for growing cells.

McCoy's 5A was developed by modifying Basal Media Eagle (BME) to include increased levels of inositol and glucose as well as the reducing agent glutathione, and bacto-peptone. This media supports the growth of a wide range of primary cells, established cell lines and tissue explants, including cells derived from bone marrow, skin, spleen, kidney, lung, gingiva, omenta, adrenals and rat embryos. It has also been used for viral production in primary cell cultures, other tissues, and transformed cell lines, including bone marrow.

details

- Contains 16.7 mM Glucose, and 1.5 mM L-Glutamine
- Available with or without HEPES or Phenol Red
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1 µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

McCoy's 5A

Cat. No.	Description	HEPES	Phenol Red?	Format	Size
SH30200.01	McCoy's 5A		Y	Liquid	500 mL
SH30200.02	McCoy's 5A		Y	Liquid	1000 mL
SH30200.FS	McCoy's 5A		Y	Liquid	6 X 500 mL
SH30270.01	McCoy's 5A		N	Liquid	500 mL
SH30270.02	McCoy's 5A		N?	Liquid	1000 mL
SH30602.01	McCoy's 5A	25.0 mM	Y	Liquid	500 mL
SH30602.02	McCoy's 5A	25.0 mM	Y	Liquid	1000 mL
SH30602.03	McCoy's 5A	25.0 mM	Y	Liquid	100 mL
SH30049.01	McCoy's 5A		Y	Powder	10 X 1 L
SH30049.02	McCoy's 5A		Y	Powder	2 X 5 L
SH30049.03	McCoy's 5A		Y	Powder	1 X 10 L



► Thermo Scientific HyClone Minimal Essential Media (MEM)

Multiple options of a classic formulation.

Minimum Essential Medium (MEM) is one of the earliest modifications of Basal Medium Eagle (BME) containing amino acid concentrations that more closely mimic those found in mammalian cells. MEM has been used with serum supplementation on a broad range of cell types including suspension and adherent mammalian cells, HeLa, BHK-21, HEK-293, HEp-2, HT-1080, MCF-7, fibroblasts and primary rat astrocytes.

Numerous other modifications of MEM have also been developed. MEM α contains non-essential amino acids, sodium pyruvate, lipoic acid, vitamin B₁₂, biotin and ascorbic acid. MEM α has been used for many cell types grown as monolayers.

MEM is available without nucleosides for use as a selection medium for DG44 and other DHFR negative cells. MEM Richter's Modification contains iron, zinc, putrescine, fatty acids, choline and inositol. Suspension modifications replace calcium with magnesium ions to inhibit cell attachment.

details

- Available with or without L-Glutamine, Sodium Pyruvate, or Phenol Red
- Multiple modifications and reduced serum options
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1 μ m sterile filtered
- Manufactured using ISO 9001:2000-certified processes

Minimal Essential Media (MEM)

Cat. No.	Description	Glucose	L-Glutamine	Sodium Pyruvate	Phenol Red?	Format	Size
SH30265.01	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Liquid	500 mL
SH30265.02	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Liquid	1000 mL
SH30265.FS	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Liquid	6 X 500 mL
SH30007.01	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Powder	10 X 1 L
SH30007.02	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Powder	2 X 5 L
SH30007.03	MEM Alpha Modification, with Ribo- and Deoxyribonucleosides	5.6 mM	2.0 mM	1.0 mM	Y	Powder	1 X 10 L
SH30219.01	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.5 mM	2.0 mM	1.0 mM	Y	Powder	1 X 10 L
SH30568.01	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.6 mM		1.0 mM	Y	Liquid	500 mL
SH30568.02	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.6 mM		1.0 mM	Y	Liquid	1000 mL
SH30568.FS	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.6 mM		1.0 mM	Y	Liquid	6 X 500 mL
SH30205.02	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.6 mM		1.0 mM	Y	Powder	2 X 5 L
SH30205.03	MEM Alpha Modification, without Ribo- or Deoxyribonucleosides	5.6 mM		1.0 mM	Y	Powder	1 X 10 L

► Thermo Scientific HyClone Minimal Essential Media (MEM), continued

Minimal Essential Media (MEM), continued

Cat. No.	Description	Glucose	L-Glutamine	Sodium Pyruvate	Phenol Red?	Format	Size
SH30024.01	MEM with EBSS	5.6 mM	2.0 mM		Y	Liquid	500 mL
SH30024.02	MEM with EBSS	5.6 mM	2.0 mM		Y	Liquid	1000 mL
SH30024.FS	MEM with EBSS	5.6 mM	2.0 mM		Y	Liquid	6 X 500 mL
SH30024.LS	MEM with EBSS	5.6 mM	2.0 mM		Y	Liquid	6 X 1000 mL
SH30008.01	MEM with EBSS	5.6 mM	2.0 mM		Y	Powder	10 X 1 L
SH30008.02	MEM with EBSS	5.6 mM	2.0 mM		Y	Powder	2 X 5 L
SH30008.03	MEM with EBSS	5.6 mM	2.0 mM		Y	Powder	1 X 10 L
SH30171.01	MEM with EBSS	5.6 mM	2.0 mM		N	Powder	10 X 1 L
SH30171.02	MEM with EBSS	5.6 mM	2.0 mM		N	Powder	2 X 5 L
SH30171.03	MEM with EBSS	5.6 mM	2.0 mM		N	Powder	1 X 10 L
SH30244.01	MEM with EBSS	5.6 mM			Y	Liquid	500 mL
SH30244.02	MEM with EBSS	5.6 mM			Y	Liquid	1000 mL
SH30244.FS	MEM with EBSS	5.6 mM			Y	Liquid	6 X 500 mL
SH30244.LS	MEM with EBSS	5.6 mM			Y	Liquid	6 X 1000 mL
SH30054.01	MEM with EBSS	5.6 mM			Y	Powder	10 X 1 L
SH30054.02	MEM with EBSS	5.6 mM			Y	Powder	2 X 5 L
SH30054.03	MEM with EBSS	5.6 mM			Y	Powder	1 X 10 L
SH30050.01	MEM with EBSS, with Non-Essential Amino Acids	5.6 mM	2.0 mM		Y	Powder	10 X 1 L
SH30050.02	MEM with EBSS, with Non-Essential Amino Acids	5.6 mM	2.0 mM		Y	Powder	2 X 5 L
SH30050.03	MEM with EBSS, with Non-Essential Amino Acids	5.6 mM	2.0 mM		Y	Powder	1 X 10 L
SH30327.01	MEM with EBSS, Autoclavable	5.6 mM			Y	Powder	1 X 10 L
SH30235.01	MEM with EBSS, Suspension Modification	5.6 mM	2.0 mM		Y	Liquid	500 mL
SH30235.02	MEM with EBSS, Suspension Modification	5.6 mM	2.0 mM		Y	Liquid	1000 mL
SH30193.02	MEM with HBSS	5.6 mM	2.0 mM		Y	Powder	2 X 5 L
SH30193.03	MEM with HBSS	5.6 mM	2.0 mM		Y	Powder	1 X 10 L
SH30269.01	MEM Glasgow Modification	25.0 mM	2.0 mM		Y	Powder	1 X 10 L
SH30601.01	MEM Richter's Modification	11.1 mM	2.0 mM	1.0 mM	Y	Liquid	500 mL
SH30601.02	MEM Richter's Modification	11.1 mM	2.0 mM	1.0 mM	Y	Liquid	1000 mL
SH30600.01	MEM Richter's Modification	11.1 mM	2.0 mM	1.0 mM	N	Liquid	500 mL
SH30600.02	MEM Richter's Modification	11.1 mM	2.0 mM	1.0 mM	N	Liquid	1000 mL
SH30603.01	MEM for Suspension Cultures, without Calcium Chloride, or Magnesium	5.6 mM			Y	Liquid	500 mL
SH30603.02	MEM for Suspension Cultures, without Calcium Chloride, or Magnesium	5.6 mM			Y	Liquid	1000 mL

► **Easily find the most suitable media and sera for your cell culture applications. Learn more about our new mobile app at: thermoscientific.com/mediaseraapp**

► Thermo Scientific HyClone RPMI 1640 Media

A general purpose media for suspension and anchorage dependent culture.

Roswell Park Memorial Institute (RPMI) 1640 media was originally developed as a modification of McCoy's 5A and contains inositol, choline, biotin, vitamin B12 and PABA. Designed for suspension cultures, RPMI 1640 has since demonstrated its utility as a general purpose medium for culturing a broad range of suspension and anchorage dependent cell types including HeLa, Jurkat, MCF-7, PC12, PBMC, myelomas, hybridomas, leukocytes, B and T lymphocytes, astrocytes and carcinomas. Most cell lines require serum supplementation when grown in RPMI 1640.

details

- Contains 11.1 mM Glucose
- Available with or without L-Glutamine, HEPES or Phenol Red
- Multiple modifications of the powdered form
- Available in multiple sizes and configurations of liquid or powder
- All liquid media products are hydrated using WFI quality water
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes



► Thermo Scientific HyClone HyClone RPMI 1640 Media, continued

RPMI 1640 Media

Cat. No.	Description	L-Glutamine	HEPES	Phenol Red?	Format	Size
SH30027.02	RPMI 1640	2.1 mM		Y	Liquid	1000 mL
SH30027.01	RPMI 1640	2.1 mM		Y	Liquid	500 mL
SH30027.LS	RPMI 1640	2.1 mM		Y	Liquid	6 X 1000 mL
SH30027.FS	RPMI 1640	2.1 mM		Y	Liquid	6 X 500 mL
SH30011.03	RPMI 1640	2.1 mM		Y	Powder	1 X 10 L
SH30011.01	RPMI 1640	2.1 mM		Y	Powder	10 X 1 L
SH30011.02	RPMI 1640	2.1 mM		Y	Powder	2 X 5 L
SH30012.03	RPMI 1640, Bakers X-Tra Soluble	2.1 mM		Y	Powder	1 X 10 L
SH30012.02	RPMI 1640, Bakers X-Tra Soluble	2.1 mM		Y	Powder	2 X 5 L
SH30255.02	RPMI 1640	2.1 mM	25.0 mM	Y	Liquid	1000 mL
SH30255.01	RPMI 1640	2.1 mM	25.0 mM	Y	Liquid	500 mL
SH30255.FS	RPMI 1640	2.1 mM	25.0 mM	Y	Liquid	6 X 500 mL
SH30537.03	RPMI 1640, ADCF	2.1 mM	25.0 mM	Y	Powder	1 X 10 L
SH30537.02	RPMI 1640, ADCF	2.1 mM	25.0 mM	Y	Powder	1 X 5 L
SH30197.03	RPMI 1640	2.1 mM		N	Powder	1 X 10 L
SH30197.01	RPMI 1640	2.1 mM		N	Powder	10 X 1 L
SH30197.02	RPMI 1640	2.1 mM		N	Powder	2 X 5 L
SH30096.02	RPMI 1640			Y	Liquid	1000 mL
SH30096.01	RPMI 1640			Y	Liquid	500 mL
SH30096.LS	RPMI 1640			Y	Liquid	6 X 1000 mL
SH30096.FS	RPMI 1640			Y	Liquid	6 X 500 mL
SH30057.03	RPMI 1640			Y	Powder	1 X 10 L
SH30057.01	RPMI 1640			Y	Powder	10 X 1 L
SH30057.02	RPMI 1640			Y	Powder	2 X 5 L
SH30328.01	RPMI 1640, Autoclavable			Y	Powder	1 X 10 L
SH30203.06	RPMI 1640		25.0 mM	Y	Liquid	1000 mL
SH30203.05	RPMI 1640		25.0 mM	Y	Liquid	500 mL
SH30605.02	RPMI 1640			N	Liquid	1000 mL
SH30605.01	RPMI 1640			N	Liquid	500 mL
SH30376.01	RPMI 1640, ADCF			N	Powder	1 X 10 L

► Thermo Scientific HyClone Classical Media for Insect Cell Culture

Multiple options of classical formulations for insect cell culture.

Thermo Scientific offers multiple options of classical media formulations for insect cell culture. These media have successfully been used for basic cell biology research and for the efficient expression of proteins using the Baculovirus Expression Vector System.

details

- Multiple classical media formulations for insect culture
- Liquid media are produced with WFI quality water and are 0.1 µm sterile filtered
- Do not contain phenol red
- Manufactured using ISO 9001:2000-certified processes

Grace's Unsupplemented

Grace's Insect Medium was originally designed for the growth of cells from the Australian Emperor Gum Moth, *Antheraea eucalypti*. Grace's Unsupplemented Insect Medium is widely used for the growth of *Spodoptera frugiperda* cells, Sf9 and Sf21. Supplementation with 10% serum is recommended.

IPL-41

IPL-41 Insect Medium was originally designed for the growth of *Spodoptera frugiperda* (Sf9) cells. IPL-41 media contains essential ingredients for insect cell culture including malic acid, fumaric acid, and alpha-ketoglutaric acid. IPL-41 is a basal medium frequently used for serum-free media development and optimization.

TNM-FH

TNM-FH is a modification of Grace's media containing yeast extract and lactalbumin designed to grow cells from the cabbage looper, *Tricoplusia ni*. The medium when supplemented with 10% Insect Screened FBS can support the growth of cells derived from a variety of lepidopteran species with minimal adaptation.

HyClone Classical Media for Insect Cell Culture

Cat. No.	Description	L-Glutamine	Sodium Bicarbonate	Format	Size
SH30610.01	Grace's Unsupplemented	4 mM	0.35 g/L	Liquid	500 mL
SH30282.01	IPL-41	7 mM		Powder	1 X 5 L
SH30280.01	TNM-FH	4 mM		Liquid	100 mL
SH30280.02	TNM-FH	4 mM		Liquid	500 mL

► Thermo Scientific HyClone HyQ-RS Reduced-Serum Media

Save while using less serum in your culture.

HyQ-RS Reduced Serum Media are nutritionally enhanced versions of classical media requiring a lower concentration of serum supplementation. Using these formulations, researchers can extend the life of a batch of serum and decrease costs.

details

- Maintain cell performance while reducing serum supplementation to 2 - 4% for most cell culture applications
- Reduced serum formulations of DMEM, Hams' F-12 and MEM
- Suitable for a wide variety of cell types normally used with standard classical formulations
- All reduced serum media contain phenol red
- 0.1µm sterile filtered
- Manufactured using ISO 9001:2000-certified processes

HyQ-RS Reduced Serum Media

Cat. No.	Description	Glucose	L-Glutamine	Size
SH30565.01	DMEM-RS	25.0 mM	4.0 mM	500 mL
SH30565.02	DMEM-RS	25.0 mM	4.0 mM	1000 mL
SH30623.01	Ham's F12-RS	10.0 mM	1.0 mM	500 mL
SH30623.02	Ham's F12-RS	10.0 mM	1.0 mM	1000 mL
SH30564.01	MEM-RS	5.5 mM	2.0 mM	500 mL
SH30564.02	MEM-RS	5.5 mM	2.0 mM	1000 mL