



BHK Life Sciences

Cell Culture Media and Reagents

Product Selection Guide





When results matter, trust
HuanKai® for your research needs.

A System that Ensures Success

With over 30 years of knowledge and experience in media development and the associated regulatory requirements of the industry, our professional teams stand behind the guarantees of strict production documentation, high purity, and consistency between production lots.

Ensure Consistent Performance

HuanKai meets strict testing requirements for all products as dictated by our Quality Systems, customer demands, and product application requirements. All finished products are extensively tested to ensure that they meet stringent release criteria.

Media and Manufacturing

State-of-the-art facilities provide prescribed redundancy of media manufacture, including designated ISO and animal component-free work areas and equipment to ensure rapid, uninterrupted supply. Proprietary and customized liquid and powder media are produced and packaged. Liquid media is filled into vials, bottles, or bioprocess containers within aseptic filling suites.

We design and
manufacture the media
that you need.



Media Services



Manufacturing Services

MEM and Alpha-MEM

Minimum Essential Medium (MEM) was developed by Harry Eagle in the 1950's to contain the optimal concentration of amino acids that would closely approximate the protein composition of mammalian cells. MEM is one of the most widely used synthetic cell culture basal media supporting a wide range of adherent cells grown in monolayers, such as fibroblasts.

Alpha-MEM is a modified Eagle's MEM that includes Earle's Balanced Salts. When supplemented with serum or serum substitutes, Alpha-MEM is suitable, and commonly used for culturing bone marrow- and amniotic fluid-derived cells, including progenitor cells.



Item	Cat.No.	Additional Information	Size	Storage
MEM	XB02	[+] phenol red, [-] L-glutamine	500mL	2 to 8°C
MEM, G-MAX	XB02-01	[+] phenol red, L-Alanyl-L-Glutamine	500mL	2 to 8°C
MEM, G-MAX, Pyruvate	XB02-02	[+] phenol red, L-Alanyl-L-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
α-MEM, no nucleosides	XB02-03	[+] L-glutamine, sodium pyruvate [-]nucleosides, deoxynucleosides	500mL	2 to 8°C
α-MEM ,no nucleosides, no phenol red	XB02-04	[+] L-glutamine, [-] nucleosides, deoxynucleosides, phenol red	500mL	2 to 8°C
α-MEM , nucleosides,	XB02-05	[+] L-glutamine , nucleosides, deoxynucleosides	500mL	2 to 8°C
MEM, no phenol red	XB02-06	[-] L-glutamine, phenol red	500mL	2 to 8°C

DMEM (Dulbecco's Modification of Eagle's Medium)

Dulbecco's Modified Eagle's Medium (DMEM) is a modification of Basal Medium Eagle (BME) that contains four-fold concentrations of the amino acids and vitamins. The original formulation contained 1000 mg/L of glucose and was used to culture embryonic mouse cells. Since then, it has been modified in several ways to support primary cultures of mouse and chicken cells, as well as a variety of normal and transformed cells. Each of these media offers a different combination of L-glutamine and sodium pyruvate.



Item	Cat.No.	Additional Information	Size	Storage
DMEM, high glucose	XB01	[+]Sodium Bicarbonate, phenol red [-]L-Glutamine,Sodium Pyruvate	500mL	2 to 8°C
DMEM, high glucose, G-MAX, pyruvate	XB01-01	[+] Sodium Bicarbonate, Phenol Red,L-Alanyl-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
DMEM, high glucose, glutamine	XB01-02	[+] Sodium Bicarbonate, Phenol Red, L-Glutamine [-] Sodium Pyruvate	500mL	2 to 8°C
DMEM, high glucose, G-MAX, HEPES	XB01-03	[+] Sodium Bicarbonate,Phenol Red, L-Alanyl-Glutamine,HEPES [-] Sodium Pyruvate	500mL	2 to 8°C
DMEM, high glucose, G-MAX, pyruvate, no phenol red	XB01-04	[+] Sodium Bicarbonate, L-Alanyl-Glutamine,Sodium Pyruvate [-] Phenol Red	500mL	2 to 8°C
DMEM, high glucose, glutamine, HEPES	XB01-05	[+] Sodium Bicarbonate,Phenol Red,L-Glutamine,HEPES [-]Sodium Pyruvate	500mL	2 to 8°C
DMEM, high glucose, glutamine, pyruvate	XB01-06	[+] L-glutamine , nucleosides, deoxynucleosides	500mL	2 to 8°C
DMEM, high glucose, HEPES, no phenol red	XB01-07	[+] Sodium Bicarbonate, HEPES [-] Phenol Red,L-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
DMEM, low glucose, G-MAX, pyruvate	XB01-08	[+] Sodium Bicarbonate, Phenol Red,L-Alanyl-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
DMEM, low glucose, glutamine, pyruvate,HEPES	XB01-09	[+] Sodium Bicarbonate,Phenol Red, L-Glutamine, Sodium Pyruvate, HEPES	500mL	2 to 8°C

DMEM/F-12 Ham 1:1 Mixture

Ham's F-12 Nutrient Mixture was designed by Ham in 1969 based on Ham's F-10 nutrient mixture, which was originally used for serum-free culture of CHO cells. Ham's F-12 is often used as the basic culture medium for serum free culture. At low serum levels, it is especially suitable for single cell culture and clonal culture. After adding serum, it is also widely used in the culture of cancer cells and primary cells, such as rat hepatocytes, rat prostate epithelial cells, chondrocytes, rat myoblasts, and chicken embryonic cells. In addition, the DMEM/F12 medium obtained by mixing Ham's F-12 in equal volume with DMEM is more nutritious and widely used.



Item	Cat.No.	Additional Information	Size	Storage
DMEM/F-12, G-MAX, pyruvate	XB04	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Alanyl-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
DMEM/F-12, G-MAX, pyruvate, HEPES	XB04-01	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Alanyl-Glutamine, Sodium Pyruvate, HEPES	500mL	2 to 8°C
DMEM/F-12, glutamine, pyruvate, HEPES, no phenol red	XB04-02	[+] D-Glucose, Sodium Bicarbonate, L-Glutamine, Sodium Pyruvate, HEPES [-] Phenol Red	500mL	2 to 8°C
DMEM/F-12, HEPES	XB04-03	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, HEPES [-] L-Glutamine, Sodium Pyruvate	500mL	2 to 8°C
DMEM/F-12, pyruvate	XB04-04	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, Sodium Pyruvate [-] HEPES, L-Glutamine	500mL	2 to 8°C
Ham's F-12 Nutrient Mix	XB04-05	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Glutamine, Sodium Pyruvate [-] HEPES	500mL	2 to 8°C

RPMI 1640

RPMI 1640 was developed at the Roswell Park Memorial Institute in 1966 for growing normal and neoplastic peripheral blood-derived leukocytes. Additionally, it has been used to cultivate a wide variety of cells in suspension or loosely attached cells such as hybridoma cells. When supplemented with serum or serum substitutes, RPMI1640 is the most commonly used basal medium for long-term culture of activated T-lymphocytes.



Item	Cat.No.	Additional Information	Size	Storage
RPMI1640, G-MAX	XB03	[+] L-Alanyl-Glutamine, D-Glucose,Sodium Bicarbonate, Phenol Red [-] Sodium Pyruvate	500mL	2 to 8°C
RPMI1640, G-MAX, HEPES	XB03-01	[+] L-Alanyl-Glutamine, D-Glucose, Sodium Bicarbonate,Phenol Red, HEPES [-] Sodium Pyruvate	500mL	2 to 8°C
RPMI1640, G-MAX, no phenol red	XB03-02	[+] L-Alanyl-Glutamine, D-Glucose, Sodium Bicarbonate [-] Sodium Pyruvate, Phenol Red	500mL	2 to 8°C
RPMI1640, G-MAX, pyruvate, HEPES	XB03-03	[+] L-Alanyl-Glutamine,D-Glucose, Sodium Bicarbonate,Phenol Red, Sodium Pyruvate, HEPES	500mL	2 to 8°C
RPMI1640, no glucose, G-MAX	XB03-04	[+] L-Alanyl-Glutamine, Sodium Bicarbonate, Phenol Red [-] D-Glucose, Sodium Pyruvate	500mL	2 to 8°C

Medium 199 (Modification)

Medium 199 is an early cell culture media developed in an effort to produce a defined nutritional source for cells. It has a wide range of species viability, and contains unique components compared to other media. Medium 199 is widely used in virology and vaccine production. The medium is commonly modified with or without the presence of L-Glutamine, Phenol Red, and more.



Item	Cat.No.	Additional Information	Size	Storage
M199, low glucose, with L-glutamine	XB05	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Glutamine [-] HEPES, Sodium Pyruvate	500mL	2 to 8°C
M199, HEPES	XB05-01	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Glutamine, HEPES [-] Sodium Pyruvate	500mL	2 to 8°C
M199, no phenol red	XB05-02	[+] D-Glucose, Sodium Bicarbonate, Phenol Red, L-Glutamine, [-] Sodium Pyruvate, Phenol Red	500mL	2 to 8°C

HEPES Buffer Solution (1M)

HEPES is an excellent biological buffer meticulously prepared to maintain a stable pH environment, particularly in cell culture and molecular biology applications where precise pH control is crucial for experimental success. Its non-toxic nature and compatibility with mammalian cell cultures make it a preferred choice for maintaining physiological conditions in vitro. Additionally, HEPES buffer is extensively used in various biochemical assays, enzyme kinetics studies, and molecular biology techniques such as polymerase chain reaction (PCR), gel electrophoresis, and protein biochemistry.

Phosphate Buffered Saline Solution (PBS)

A common diluent and rinsing solution, PBS maintains cell culture media in the physiological pH range, it is also useful for reconstituting enzymes for tissue dissociation or lifting cells from substrates.



Item	Cat.No.	Additional Information	Size	Storage
HEPES 1M	XBA01	pH: 6.8 to 8.2	20mL	2 to 8°C
L-Alanyl-L-Glutamine Solution	XBA02	Concentration: 200mM	100mL	2 to 8°C
Sodium Pyruvate Solution	XBA03	Concentration: 100mM (11.0 g/L)	100mL	2 to 8°C
L-Glutamine Solution	XBA04	Concentration: 29.2 g/L	100mL	-20°C
MEM Eagle Non-Essential Amino Acids Solution	XBA05	Concentration: 10.00 mM	100mL	2 to 8°C
Trypsin-EDTA (0.25%), phenol red	XBA06	0.25% trypsin, 0.02% EDTA	100mL	-20°C
Trypsin-EDTA (0.25%)	XBA06-01	0.25% trypsin, 0.02% EDTA, no phenol red	100mL	-20°C
Trypsin-EDTA (0.05%), phenol red	XBA07	0.5 g/L trypsin, 0.2 g/L EDTA·4Na	100mL	-20°C
Trypsin-EDTA (0.25%)	XBA07-01	0.5 g/L trypsin, 0.2 g/L EDTA·4Na, no phenol red	100mL	-20°C
PBS 1X-Dulbecco's Phosphate Buffered Saline Solution	XB07	pH 7.2-7.4, no Calcium, Magnesium, Phenol Red	500mL	2-30°C

Cell Counting Kit-8 (CCK8)

Cell Counting Kit-8 (CCK-8) allows sensitive colorimetric assays for the determination of cell viability in cell proliferation and cytotoxicity assays. HuanKai's highly water-soluble tetrazolium salt, WST-8, is reduced by dehydrogenase activities in cells to give a yellow-color formazan dye, which is soluble in the tissue culture media. The amount of the formazan dye, generated by the activities of dehydrogenases in cells, is directly proportional to the number of living cells. The detection sensitivity of CCK-8 is higher than the other tetrazolium salts such as MTT, XTT, MTS or WST-1. No reagent preparation is required, can be used with media containing phenol red.



Item	Cat.No.	Additional Information	Size	Storage
Cell Counting Kit-8	XBPO1	WST-8 solution, 1-methoxy-PMS	1mL	2 to 8°C
	XBPO2	WST-8 solution, 1-methoxy-PMS	2.5mL	2 to 8°C
	XBPO3	WST-8 solution, 1-methoxy-PMS	5mL	2 to 8°C

MEM and Alpha-MEM

Contains	Cat.No.						
	XB02	XB02-01	XB02-02	XB02-03	XB02-04	XB02-05	XB02-06
Sodium Pyruvate							
HEPES							
Hanks'salts (2% CO2)							
NaHCO3							
Earle’s salts (5% CO2)							
Phenol Red							
L-Glutamine							
Glucose							
Stable Glutamine							
Nucleosides							

DMEM (Dulbecco’s Modification of Eagle’s Medium)

Contains	Cat.No.										
	XB01	XB01-01	XB01-02	XB01-03	XB01-04	XB01-05	XB01-06	XB01-07	XB01-08	XB01-09	XB02-10
Sodium Pyruvate											
HEPES											
Hanks'salts (2% CO2)											
NaHCO3											
Earle’s salts (5% CO2)											
Phenol Red											
L-Glutamine											
D-Glucose	H		H	H	H	H	H	H	L	L	
Stable Glutamine											

RPMI 1640

Contains	Cat.No.			
	XB03	XB03-01	XB03-02	XB03-03
Sodium Pyruvate				
HEPES				
NaHCO3				
Phenol Red				
L-Glutamine				
Glucose				

DMEM/F-12

Contains	Cat.No.					
	XB04	XB04-01	XB04-02	XB04-03	XB04-04	XB04-05
Sodium Pyruvate	◆	◆	◆		◆	◆
HEPES		◆	◆	◆		
NaHCO3	◆	◆	◆	◆	◆	◆
Phenol Red	◆	◆		◆	◆	◆
Stable Glutamine	◆	◆	◆			◆
Glucose	H	H	H	H	H	L

Medium 199

Contains	Cat.No.		
	XB05	XB01501	XB05-02
Sodium Pyruvate			
HEPES		◆	
Earle's salts (5% CO2)	◆	◆	◆
NaHCO3	◆	◆	◆
Phenol Red	◆	◆	
L-Glutamine	◆	◆	◆
D-Glucose	◆	◆	◆

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At BHK, we continuously strive towards improving efficiencies and developing new products and technologies for life science researchers. Our technical experts understand your challenges and your increased need for high-quality products. It is this expertise, plus decades legacy of BHK innovation and manufacturing excellence, that puts us in a unique position to be able to offer a beginning-to-end portfolio of high-quality, reliable life sciences consumables.

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