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CELL BIOLOGY

Eurolone®

SERVING SCIENCE THROUGH INNOVATION

Since our establishment in the early 80's, Euroclone has given scientists a valuable opportunity to gain access to a world of products and equipment in Biotechnology.

During more than three decades of experience, our Company has evolved into a modern supplier of up-to-date and own-branded products, pursuing affordability and quality: all manufacturing procedures are strictly regulated with raw materials, bulks and final products undergoing stringent controls.

Euroclone provides innovative products, services and solutions for Molecular and Cell Biology, Genomics, Proteomics, Cytogenetics and Agro-Food Diagnostics.

From the choice of high-quality products to the after sales service, Euroclone is your reliable and solid partner for your scientific challenges.

In 2019 Euroclone is acquired by AddLife AB becoming part of an important international group. This step ensure continuity and further expansion of the company in the Italian market and in the export of the proprietary private lines, key and distinctive element of the identity of Euroclone.

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INTRODUCTION

Cell culture is an important technique in both cellular and molecular biology given that it provides the best platform for studying the normal physiology and biochemistry of cells.

A cell is the basic structural, functional and biological unit of all living things. To understand an organism or given tissues, it is important to understand how its cells work. Whatever is learnt about the cells *in vitro* is representative of what is happening to the organism/tissue.

This makes cell culture significantly important for vaccine development, screening (drugs etc) and diagnosis of given diseases/conditions.

Given that different types of cells require different environments for proliferation, there are different types of media used for culture; cell culture medium is a complex mixture of approximately 30–50 components including sugars, amino acids, buffers, salts, vitamins, serum or serum-replacement.

Having a good understanding of what the procedure is meant to achieve, it becomes easier to prepare the culture with the right components. By understanding what the procedure is aimed for, the researcher will know whether to prepare a selective media (which allow for specific cells to grow) or differential media (allowing for different types of cells to grow).

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SERA

High quality FBS can come from any of the **EU** (European Union) and **USDA** (United States Department of Agriculture) approved countries; both regulations, European and USA, require that all FBS, regardless of country origin, must be tested to assess virus's absence.

The raw material is collected in closed sterile bags to avoid bacterial contamination and high level of endotoxins, is always shipped and stored at -20°C.

The quality of our sera is checked at each step of the production process; the filtration and dispensing are performed under positive pressure in HEPA-filtered environmentally controlled rooms. To ensure homogeneity, serum is "true-pooled": it is first filtered through a series of 0.1 µm pore-size filters and then pooled.

Sera are all tested for the absence of aerobic and anaerobic bacteria, fungi, yeast and for Mycoplasma. A physical-chemical screening is performed on all batches to assess level of several parameters, like Osmolality, Haemoglobin, Endotoxin, Total Protein, pH... and many others.

Each batch of FBS is tested for its ability to support ***in vitro*** growth of specific cell lines; three important performance criteria are evaluated in our Quality Control Program: Growth Promotion, Cloning Efficiency, and Plating Efficiency.

These products are intended for research applications, not for diagnostic use and not intended for human consumption. It is the end user's responsibility to qualify these products for their specific application.

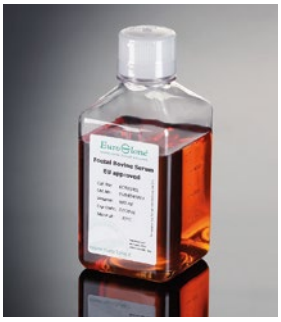
Although Fetal Bovine Serum (FBS) and other bovine sera are the most commonly used products, many other sera are available, like Human serum and sera from other species like horse, chicken, goat and rabbit.

Standard FBS

Euroclone Standard Fetal Bovine Sera are characterized by high quality and homogeneity; they are used as the main source for growth factors, vitamins, hormones, attachment and transport factors and other cell stimulating components.

Features

- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)
- USDA approved: Origin depends on batch number (mainly USA, Australia, Mexico, Costa Rica...)
- Triple 100 nm Filtered
- For each batch a Certificate of Analysis (CoA) is available on request.



Ordering information

Cat.No.	Description	Volume	Store
ECS5000D	FBS South America Origin EU approved	100 ml	-20°C
ECS5000L	FBS South America Origin EU approved	500 ml	-20°C
ECS1104L	FBS United States Origin USDA approved	500 ml	-20°C
ECS1102D	FBS US Origin USDA approved	100 ml	-20°C
ECS0170L	FBS Australian Origin USDA approved	500 ml	-20°C
ECS0120D	FBS Mexico origin USDA approved	100 ml	-20°C
ECS0120L	FBS Mexico origin USDA approved	500 ml	-20°C
ECS0160D	FBS Central America origin USDA approved	100 ml	-20°C
ECS0160L	FBS Central America origin USDA approved	500 ml	-20°C

"Special" Fetal Bovine Sera

"Special" FBS are semi-processed FBS or already sterile filtered FBS that have been subjected to one or more processes, or that has been enhanced or altered in some way. The following are the "special" FBS products that Euroclone can offer.

Heat Inactivated FBS

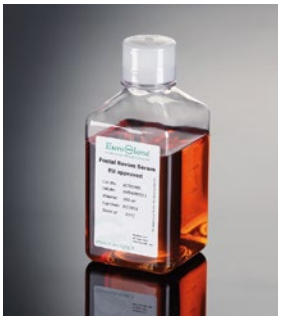
FBS Heat Inactivation is performed at 56°C for 30 minutes with consequent inactivation of complement system. a group of proteins present in sera that are part of the immune response. This is sometimes important for cells that will be used to prepare or assay viruses, used in cytotoxicity assays or other systems where complement may have an unwanted influence.

Heat Inactivation is also recommended for growing embryonic stem cells. This treatment allows also to inactivate viruses and to destroy some bacterial contaminants such as mycoplasma.

It has been reported that heat inactivation will reduce or destroy serum growth factors, and should only be done when there is a compelling.

Features

- Heat inactivation treatment is carried out in a controlled environment to reproduce consistently accurate procedure.
- Heat Inactivation performed at 56°C for 30 mins
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)
- USDA approved: Origin depends on batch number (mainly USA, Australia, Mexico, Costa Rica...)
- Triple 100 nm Filtered
- For each batch a Certificate of Analysis (CoA) is available on request.



This treatment is available for any type of serum, adding letter H at the end of Cat N° (I.e. EC-S5000DH, ECS5000LH).

Gamma Irradiated FBS

Viral clearance is a major concern for manufacturers of both human and animal biological products. Gamma Irradiated FBS is irradiated at 25-35 kGy with reduction or elimination of virus and bacteria.

The use of Gamma Irradiated FBS is suggested for virus and vaccine productions, on biopharmaceutical productions and during the manufacture of diagnostic products.

The Gamma irradiation treatment inactivates the viruses of foot and mouth disease, vesicular stomatitis, rinderpest, small ruminants pest, Rift valley fever, bluetongue, while maintaining growth promotion potential.

Features

- Gamma irradiation at 25-35 kGy
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)
- USDA approved: Origin depends on batch number (mainly USA, Australia, Mexico, Costa Rica...)
- Triple 100 nm Filtered
- For each batch a Certificate of Analysis (CoA) is available on request.

This treatment is available for any type of serum, adding letter I at the end of Cat N° (I.e. EC-S5000DI, ECS5000LI)

Ultra-low Endotoxin

Ultra Low Endotoxin FBS has a guaranteed Endotoxin level of < 0.1 EU/mL and is the preferred choice for all research, academic and industrial applications that use sensitive cell cultures or other applications that could be affected by high endotoxin levels.

It has the same high-quality standards as our other sera, and it is triple 100 nm filtered and tested for virus and mycoplasma contamination. All manufacturing steps are in accordance with the European regulations and follow the highest quality standards.

Features

- Ideal for sensitive Cells & Applications
- Lowest endotoxin level : < 0.1 EU/mL
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS0186D	ULTRA Low Endotoxin FBS	100 ml	-20°C
ECS0186L	ULTRA Low Endotoxin FBS	500 ml	-20°C

FBS Premium

This serum is a collection of South America high quality batches, selected on excellent and defined values for essential data:

- endotoxin level < 5 Eu/ml,
- hemoglobin level < 25 mg/100 ml,
- growth promotion > 80%.

Following those criteria, we ensure a low batch-to-batch variation, users save time in their daily work avoiding time consuming batch testing.

Features

- This treatment removes some growth factors
- Mainly used for special applications
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS9001D	Premium FBS	100 ml	-20°C
ECS9001L	Premium FBS	500 ml	-20°C

Embryonic Screened Euromed ES FBS

Embryonic Screened Euromed ES FBS is specially tested for the ability to keep ES cell in their valuable undifferentiated state. The screening includes colony morphology, toxicity tests and plating efficiency. The cell growth studies are performed on mouse embryonic stem cell E14 cell line.

Features

- Embryonic Stem (ES) cell screened
- No pre-screening needed
- Indifferentiated cell growth guaranteed
- Endotoxin level ≤ 1 EU/ml
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS0196D	Euromed ES FBS	100 ml	-20°C
ECS0196L	Euromed ES FBS	500 ml	-20°C

Tetracycline Screened FBS

Tetracycline Screened FBS is designed for expression studies in Tet-on/Tet-off systems and transfection. The serum is tested for the presence of Chlortetracycline, Oxytetracycline and Tetracycline by a liquid chromatography electrospray ionisation tandem mass spectrometry method. The detection limit is < 0.05 mg/l.

Features

- Batches with undetectable level of any tetracycline derivates
- Ideal for researchers using TETon/TETtoff systems
- Suitable for transfection and expression studies
- High growth capacity
- Low IgG content
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly Latin America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS0182D	Tetracycline Screened FBS	100 ml	-20°C
ECS0182L	Tetracycline Screened FBS	500 ml	-20°C

Dialysed FBS

The use of Dialysed FBS is suggested for hormone free cell culture, minimal essential growth supplement and incorporation studies.

Dialysed FBS is produced by a filtration process that reduce concentration of many molecules, such as hormones, nucleotides, ions and amino acids. The membrane used to filter the serum has a 10 KDa cut-off. The serum is dialysed against a solution of sterile PBS.

Features

- This treatment removes some growth factors
- Mainly used for special applications
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly South America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS0181D	Dialyzed FBS	100 ml	-20°C
ECS0181L	Dialyzed FBS	500 ml	-20°C

Exosome depleted FBS

Exosomes are extracellular vesicles released from the cells by the plasma membrane. The biological functions of these structures are the most important issue in exosome research.

The use of this serum allows to prevent the interference between the exosomes naturally present in the serum and those derived from the culture cells. This serum is treated with ultrafiltration method, that depletes ≥ 95% of exosome.

Features

- This treatment removes >= 95% of exosomes and other E.V. (Extracellular Vesicles)
- Mainly used for special applications
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly Latin America: Brazil, Colombia..)

Ordering information

Cat.No.	Description	Volume	Store
ECS8001N	Exosome Depleted FBS	50 ml	-20°C

Charcoal/Dextran treated FBS

This charcoal/dextran stripped FBS can be used both *in vivo* and *in vitro* cell culture, is suggested for utilization in receptor studies, estrogen related investigations, or when endogenous steroid hormones may interfere with experimental work. Moreover, some studies indicate that Charcoal/Dextran treatments may be used to minimize lot to lot serum variability.

Features

- The treatment reduces the concentration of steroid hormones (estradiol, progesterone, cortisol, testosterone, T3, T4)
- Mainly used for special applications
- Triple 100 nm Filtered
- EU approved: Origin depends on batch number (mainly South America and Europe)

Ordering information

Cat.No.	Description	Volume	Store
ECS0140L	FBS Charcoal/Dextran Stripped	500 ml	-20°C

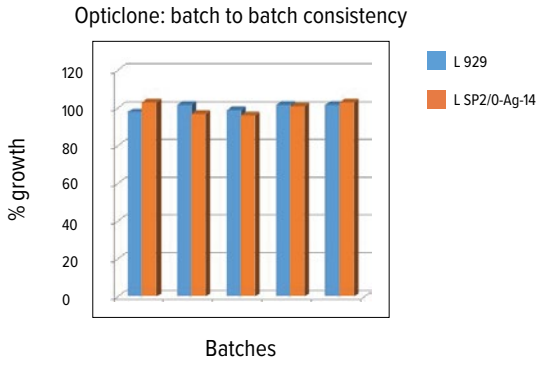
Other Sera

OptiClone

Fetal Bovine Serum is a natural, organic product which can vary significantly in its biochemical composition between batches. OptiClone Serum it is not a synthetic serum, but **a pool of bovine serum,** and is carefully selected and extensively tested to guarantee performances and consistency. It has been demonstrated to promote the cell growth in more than the 80% of the tested cell lines: SP2, L929, HEK293, MDCK, HeLa, Vero, and several others, OptiClone has always the same quality, batch to batch variation is reduced to less than 10%, this eliminates the need for extensive and time-consuming batch testing and associated problems. OptiClone is suitable for all applications where standard FBS is used, on suspension and adherent cells.

Features

- Serum type: Calf plus Fetal, Origin South America
- Low Endotoxin level <1 EU/ml
- Cell performances broad applicability
- Batch reservations are no needed.
- Sterility test on Bacteria, fungi and mycoplasm tested
- 200 nm Filtered



Ordering information

Cat.No.	Description	Volume	Store
ECS0183L	OptiClone serum	500 ml	-20°C

Bovine Serum

Serum provides proteins, nutrients and other components which support the cell growth. FBS is the most commonly used serum product, but nowadays it is becoming important to evaluate other alternative products which are sold at a lower cost, such as bovine serum. Newborn calf serum and adult bovine serum contain more immunoglobulins compared to FBS and have increased protein content, but they are a cost-effective alternative to FBS.

Features

- Origin depends on batch number (Europe, South America, USA...)
- 200 nm Filtered

Ordering information

Cat.No.	Description	Volume	Store
ECS0070D	Newborn Calf Serum (calves up to 10 days old)	100 ml	-20°C
ECS0070L	Newborn Calf Serum (calves up to 10 days old)	500 ml	-20°C
ECS0040D	Calf Serum (calves up to 8 months old)	100 ml	-20°C
ECS0040L	Calf Serum (calves up to 8 months old)	500 ml	-20°C
ECS0020D	Bovine Serum (cattles more than 12 months old)	100 ml	-20°C
ECS0020L	Bovine Serum (cattles more than 12 months old)	500 ml	-20°C

Human Serum

Human Serum “off the clot” is obtained from whole human male blood, AB group, volunteers donor. It goes through the natural blood clotting process (not treated with anticoagulants), and only then it is centrifuged, removing the solid constituents of the blood together with the fibrin. It contains neither anti-A nor anti-B antibodies. Each batch is rigorously controlled and screened for Hepatitis B (HBS), Hepatitis C (HCV) and HIV Type 1 and 2 (HIV1/2). The use is suggested for sensitive cell culture, it is suitable for most human cells and it is specially recommended for lymphocytes and human macrophages. The serum is collected or imported and treated in agreement with the European regulations. The sera are sourced from Europe, USA and USDA Approved countries.

Features

- From whole blood
- Single-use blood donor bags
- No anticoagulant added, naturally clotted
- Centrifuged
- Without fibrin
- Without AB antibodies
- Origin depends on batch number
- 200 nm filtered

Ordering information

Cat.No.	Description	Volume	Store
ECS0219D	Human Serum AB male	100 ml	-20°C

Other Species Sera

Euroclone collects serum of other species than bovine, the process is fully controlled and tracked as it is for the bovine serum. Our system of vertical integration allows us to be certain of the origins and traceability of our serum. Each manufactured batch is rigorously controlled, from the collection of serum and throughout all stages of its treatment and production to final packaging on our premises. The serum is collected or imported and treated in agreement with the European regulations. origin from EU approved countries. Origin depends on batch number. 200 nm filtered.

Ordering information

Cat.No.	Description	Volume	Store
ECS0090D	Donor Horse Serum	100 ml	-20°C
ECS0090L	Donor Horse Serum	500 ml	-20°C
ECS0091D	Horse Serum	100 ml	-20°C
ECS0091L	Horse Serum	500 ml	-20°C
ECS0050D	Chicken Serum	100 ml	-20°C
ECS0050L	Chicken Serum	500 ml	-20°C
ECS0200D	Goat Serum	100 ml	-20°C
ECS0200L	Goat Serum	500 ml	-20°C
ECS0210D	Sheep Serum	100 ml	-20°C
ECS0240D	Porcine Serum	100 ml	-20°C
ECS0240L	Porcine Serum	500 ml	-20°C
ECS0250D	Rabbit Serum	100 ml	-20°C

All Euroclone Sera can be treated (Gamma irradiation, heat inactivation....). Please inquire about the possibilities

Serum Replacement

IsoCell GROWTH Plus

IsoCell GROWTH Plus is a Human Platelet Lysate (HPL) that allows the cell cultures growth in animal serum-free conditions. This reagent supports the proliferation of different human cells, cell lines and primary cells, including human mesenchymal stem cells (hMSC): in the majority of cases addition of serum is a huge obstacle during production and development of these cells for therapeutic purposes.

In most cases the culture medium supplemented with IsoCell GROWTH Plus supports a higher growth rate and allows a higher viability than fetal bovine serum.

Isocell Growth Plus is derived from human, healthy volunteer donors, tested for the following infection parameters: HBsAg, HBV DNA, anti-HCV, HCV RNA, anti-HIV, HIV RNA and Lues serology.

Features

- Xeno free alternative to FBS, Human components only
- Ready-to-use: heparin addition is not required
- Increases the *in vitro* expansion of MSCs
- Low cell senescence after long term cell culture with HPL
- No unpredictable differentiation of stem cells
- MSCs cell culture integrated with HPL maintain their osteogenic, chondrogenic and adipogenic properties
- Low lot-to-lot variability

Ordering information

Cat.No.	Description	Volume	Store
ESA0010N	IsoCell GROWTH PLUS	50 ml	-20°C

EuroSF Supplement

This reagent is a chemically defined cell culture supplement (SF: Serum Free), optimised for the *in vitro* cell culture, in an animal-derived component free environment.

It provides the necessary nutritional support for cell growth and development and is appropriate for most animal cell types, both anchorage-dependent and suspension cell culture types, as well as primary cultures and stem cells.

EuroSF replaces most supplements like Bovine Serum in an attempt to reproduce the normal extracellular environment.

Features

- Chemically defined: no need for batch testing and reservation
- Animal derived component free
- Albumin and growth factors free
- Virus and TSE/BSE free
- Suitable for most cell lines, primary and stem cells (NIH/3T3; CHO-K1; RLEC...)
- Performances similar or better that animal serum

Ordering information

Cat.No.	Description	Volume	Store
ESA0700L	EuroSF Supplement	500 ml	2-8 °C

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BASAL MEDIA

Euroclone utilizes its state-of-the-art filtration and aseptic-filling technologies to manufacture its line of liquid media. All processes are thoroughly validated to ensure that our products meet quality standards and relevant guidelines.

Euroclone media formulations are manufactured following original publications, standards set by the Tissue Culture Association and accepted formulations.

Standard formulas are available in lot sizes up to 10000 liters for powder media, and up to 2000 liters for liquid media.

Manufacturing Information

Raw Materials

Chemicals used to manufacture Euroclone liquid media, salt mixtures and reagents are of the highest purity commercially available. All chemicals conform, where applicable, to the published standards of the American Chemical Society (ACS), European Pharmacopeia (EP) or the United States Pharmacopeia (USP).

Euroclone's quality assurance program includes in-coming raw material testing for identification and purity. Certificates of Analysis from vendors or manufacturers are required to support identity, purity, safety and performance claims.

The water used for media preparation is the best WFI water, purified in several steps, including centrifugal distillation and tested for endotoxins. The water is always freshly processed and cooled down to 25°C before adding the powder media.

Manufacturing Methods, Facilities and Validation

Liquid products are membrane sterilized, through a 100 nm pore size sterile filter, and aseptically dispensed into Gamma-irradiated polyethylene (PETG) plastic bottles

All manufacturing processes and facilities are qualified and validated to ensure consistency and suitability for intended use. The intended use of Euroclone media and reagents for cell culture is for research applications, not for diagnostic or clinical use. It is the end user's responsibility to qualify these products for their specific application.

The Euroclone Validation Group plans and supervises the qualification of key production equipment and production processes, following relevant current guidelines and ISO 9001 (2015).

Biological Performance

Euroclone products capability to promote cell growth is assessed in functional cell culture systems designed to replicate, as closely as possible, actual laboratory applications. Whenever possible, the cell lines and the technique employed in testing reflect the original or most common applications of the medium. The cell lines used in testing represent a selection of normal, transformed or hybrid cell lines with a diverse range of nutritional and metabolic requirements. The number of cell lines used may vary according to the medium being tested. Cell cultures are monitored for evidence of nutritional deficiency, cytotoxicity, or morphological aberrations indicative of toxic components in the product. Each product is tested in parallel with a validated control lot. Certain media are subjected to special application testing that includes growth promotion, plating efficiency and cloning efficiency.

Microbiological Testing

The liquid media are tested for sterility, pH and osmolarity.

Sterility testing of liquid products is carried out according to the membrane filtration method as described in the USP and EP.

pH is measured by standard techniques (20-25°C). Osmolarity is measured by freezing point method.

Endotoxin testing is performed using the Limulus Amoebocyte test and is also by a Chromokinetic test.

Storage and handling

Store liquid medium at 2-8°C in the dark.

Liquid media deterioration may be recognized by pH change, color change precipitate/particulates in the solution, cloudy appearance.

Expiration date of each product is reported on the label.

Several Euroclone Liquid Media can be available as Powder Media. Our production can customize reagents formulations according to the specific requests of the projects. Please inquire about the possibilities!

See Chapter 4 "Dry Powder Media&Reagents"

Dulbecco's Modified Eagle's Medium

Dulbecco's Modified Eagle's Medium contains a four-fold increase in the concentration of amino acids and vitamins found in Eagle's Basal Medium (BME). DME media were originally developed for use with a serum supplement in a 10% CO_2 atmosphere for the culture of non-transformed mouse and chicken cells. DMEM and its modifications are widely used to support the growth of a broad spectrum of mammalian cells. There are two types of DMEM: one with a high glucose content (4.5 g/L), and the other with a low glucose content (1.0 g/L)

Dulbecco's Modified Eagle's Medium, HIGH Glucose (DME/HIGH)

Ordering information

Cat.No.	Description	Volume	Store
ECB7501L	DMEM High Glucose	500 ml	2°-8°C
ECM0728L	DMEM High Glucose with L-Glutamine	500 ml	2°-8°C
ECM0101L	DMEM High Glucose w/o Na Pyruvate	500 ml	2°-8°C
ECM0102L	DMEM High Glucose with L-Glutamine w/o Na Pyruvate	500 ml	2°-8°C
ECM0103L	DMEM High Glucose with stable L-Glutamine	500 ml	2°-8°C
ECB7504L	DMEM High Glucose, w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Dulbecco's Modified Eagle's Medium, Low Glucose (DME/LOW)

Ordering information

Cat.No.	Description	Volume	Store
ECM0749L	DMEM Low Glucose	500 ml	2°-8°C
ECM0070L	DMEM Low Glucose with 25 mM Hepes and L-Glutamine	500 ml	2°-8°C
ECM0060L	DMEM Low Glucose with L-Glutamine	500 ml	2°-8°C
ECM0066L	DMEM Low Glucose with stable L-Glutamine	500 ml	2°-8°C
ECM0063L	DMEM Low with L-Glutamine, w/o Phenol Red	500 ml	2°-8°C
ECM0062L	DMEM w/o Glucose, w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Dulbecco's MEM/F-12

Dulbecco's MEM/F-12 is a 1:1 mixture of Dulbecco's Modified Eagle's medium, (DME) and Ham's F-12 nutrient mixture. This mixture is used for supporting the growth of a broad spectrum of mammalian cells (epithelial, endothelial, etc), even in serum-free conditions, in combination with growth factors and hormones.

For optimum buffering, use in a 5% CO_2 atmosphere.

Ordering information

Cat.No.	Description	Volume	Store
ECM0090L	DMEM/F-12 (1:1)	500 ml	2°-8°C
ECM0095L	DMEM/F-12 (1:1) with 25 mM Hepes and L-Glutamine	500 ml	2°-8°C
ECM0096L	DMEM/F-12 (1:1) with 25 mM Hepes	500 ml	2°-8°C
ECM0097L	DMEM/F-12 (1:1) with Stable L-Glutamine	500 ml	2°-8°C
ECM0099L	DMEM/F-12 (1:1) with L-Glutamine w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Ham's Nutrient Mixture

Ham's Nutrient Mixture F-10

Nutrient Mixture F-10 Ham's (Ham's F-10) is used for the growth of Chinese Hamster Ovary cells (CHO). Supplemented with standard or dialyzed serum or in combination with hormones and growth factors, Ham's F-10 is widely used for the growth of a broad spectrum of mammalian. For optimum buffering, use in a 5% CO_2 atmosphere.

Ordering information

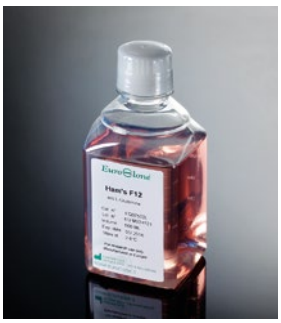
Cat.No.	Description	Volume	Store
ECB7503L	HAM'S F-10	500 ml	2°-8°C
ECM0140L	HAM'S F-10 with L-Glutamine	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Ham's Nutrient Mixture F-12

Nutrient mixture F-12 Ham's (Ham's F-12) was originally designed for the serum-free growth of Chinese Hamster ovary, lung cells and mouse L-cells. It is the medium of choice for supporting the growth of cells of rodent origin (like rabbit and rat) and has proved to be an excellent cloning medium for the culture of myeloma and hybrid cells (hybridomas).

For optimum buffering use in a 5% CO_2 atmosphere.



Ordering information

Cat.No.	Description	Volume	Store
ECB7502L	HAM'S F-12	500 ml	2°-8°C
ECM0135L	HAM'S F-12 with L-Glutamine	500 ml	2°-8°C
ECM0137L	HAM'S F-12 w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Minimum Essential Medium (MEM)

MEM/EBSS and MEM/HBSS

Minimum Essential Medium (MEM) was developed by Harry Eagle as a modification of his BME medium containing a higher concentration of essential nutrients. MEM is a non-complex medium well suited for a wide range of mammalian cells when used with a serum supplement.

MEM with Earle Basal Salt Solution (MEM/EBSS) is designed for use in a 5% CO_2 atmosphere; MEM with Hank's Basal Salt Solution (MEM/HBSS) is designed for use in closed containers without CO_2 exchanges.

MEM-Alpha Modification

MEM Alpha is a modification of MEM that contains non-essential amino acids, sodium pyruvate, thioctic acid, vitamin B12, biotin, and ascorbic acid. MEM Alpha can be used with a variety of suspension and adherent mammalian cells.

These modifications were first described by Stanners for use in growing hybrid mouse and hamster cells.

The formulation is without the deoxyribonucleosides and ribonucleosides originally used in Stanners' studies.

Ordering information

Cat.No.	Description	Volume	Store
ECB2071L	MEM with Earle's Salts	500 ml	2°-8°C
ECB2070L	MEM with Earle's Salts with L- Glutamine	500 ml	2°-8°C
ECM0445L	MEM with Earle's Salts, with 25 mM HEPES	500 ml	2°-8°C
ECM0430L	MEM with Earle's Salts with NEAA	500 ml	2°-8°C
ECM0909L	MEM with Hank's Salts	500 ml	2°-8°C
ECM0470L	MEM with Hank's Salts, with 25 mM HEPES	500 ml	2°-8°C
ECM0849L	MEM ALPHA MEDIUM w/o ribonucleosides	500 ml	2°-8°C
ECM0850L	MEM Alpha Medium, w Stable L-Glutamine w Deoxyribonucleosides & Ribonucleosides	500 ml	2°-8°C
ECB2069L	MEM Eagle (2x) with Earle's Salt, w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Medium 199

Medium 199 is one of the first chemically defined media used without a serum supplement for the continuous growth of primary chicken embryo heart and fibroblast cells.

Nowadays 199 media are widely used for the maintenance of non-transformed cells, vaccine and virus production and primary explants of epithelial cells. The media can be formulated either with Earle salts or Hanks Salts.

Medium 199 with Earle's is optimised for 5-10% CO_2 atmosphere.

Medium 199 with Hanks salts are buffered with saline solutions designed for balancing in ambient conditions.

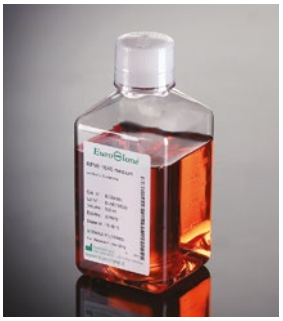
Ordering information

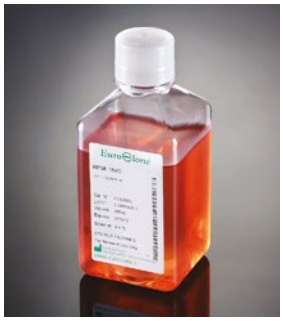
Cat.No.	Description	Volume	Store
ECB2056L	Medium 199 with Earle's salts	500 ml	2°-8°C
ECM0320L	MEDIUM 199 with Earle's Modified Salts with L-Glutamine and 1.25 g/l Sodium Bicarbonate	500 ml	2°-8°C
ECM0330L	Medium 199 with Hank's Salts and L-Glutamine	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

RPMI 1640 Medium

RPMI 1640 medium was developed by Moore and his co-workers in 1966 at Roswell Park Memorial Institute, hence the acronym RPMI. Originally designed for the growth of human leukemia cells in monolayer or suspension cultures using a serum supplement, it has since demonstrated universal use in the growth and support of a broad spectrum of mammalian and hybridoma cells, including human myeloma, human leukocytes, and B and T lymphocytes.





Ordering information

Cat.No.	Description	Volume	Store
ECB9006L	RPMI 1640 MEDIUM	500 ml	2°-8°C
ECB2000L	RPMI 1640 MEDIUM with L-Glutamine	500 ml	2°-8°C
ECM2001L	RPMI 1640 MEDIUM with stable L-Glutamine	500 ml	2°-8°C
ECM9106L	RPMI 1640 MEDIUM with 25 mM Hepes	500 ml	2°-8°C
ECM0495L	RPMI 1640 MEDIUM with 25 mM Hepes and L-Glutamine	500 ml	2°-8°C
ECM0505L	RPMI 1640 w/o Phenol Red	500 ml	2°-8°C
ECM0620L	RPMI 1640 MEDIUM w/o Folic Acid (FRAGILE X CHROMOSOME MODIFICATION)	500 ml	2°-8°C
ECB2055L	RPMI 1640 MEDIUM DUTCH MODIFICATION with 20 mM Hepes and 1 g/l Sodium Bicarbonate	500 ml	2°-8°C
ECB2002L	RPMI with L-Glutamine w/o Phenol Red	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Iscove's Modified Dulbecco's Medium (IMDM)

Iscove's Modified Dulbecco's Medium (IMDM) is a modification of DMEM high glucose (4500 mg/l). It contains sodium pyruvate and additional amino acids, HEPES buffer, selenium and other components.

IMDM was originally designed for the serum-free growth of primary hematopoietic cells when, properly supplemented. When used in conjunction with serum, IMDM supports the growth of a broad spectrum of mammalian cells.

IMDM is ideal for rapidly proliferating high density cell cultures in a 5% CO_2 atmosphere.

Ordering information

Cat.No.	Description	Volume	Store
ECM0192L	ISCOVE'S MODIFIED DULBECCO'S MEDIUM	500 ml	2°-8°C
ECB2072L	ISCOVE'S MODIFIED DULBECCO'S MEDIUM with 25 mM Hepes and L-Glutamine	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Mc Coy's 5A Medium

Dr. Thomas McCoy originally formulated McCoy's 5A medium as a modification of Basal Medium 5A. Unlike other media, McCoy's 5A contains the reducing agent glutathione, bacto-peptone, and a high level of glucose.

Mc Coy's 5A with a serum supplement in a 5% CO_2 atmosphere is widely used to support the growth of a broad spectrum established cell lines, explants from biopsy tissues, and primary mammalian cells derived from normal bone marrow, skin, spleen, kidney, lung, rat embryos, and other tissues.

Ordering information

Cat.No.	Description	Volume	Store
ECM0210L	Mc COY'S 5A MEDIUM with L-Glutamine	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Leibovitz L-15 Medium

The Leibovitz L-15 media were formulated to promote the cell growth in medium not balanced in CO_2. The formulations were developed with the sodium bicarbonate buffer. The Leibovitz L-15 media are buffered by a complement of salts, free base amino acids and galactose, so they can be used under conditions of free gaseous exchange with the atmosphere. When properly supplemented, L-15 Medium supports established cell lines, such as HEp-2 and LLC-MK2, as well as primary explants of embryonic and adult human.

Ordering information

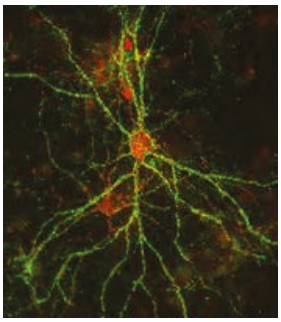
Cat.No.	Description	Volume	Store
ECB0020L	Leibovitz's L-15 Medium	500 ml	2°-8°C

Notes: when Medium contains L-Glutamine is reported "with L-Glutamine"; when Medium does not contain Phenol Red is reported "w/o Phenol Red"; multiple pack are available for several codes, please enquire.

Euromed-N

Euromed-N is a specific medium optimized for the long-term culturing of murine, rat, monkey and human embryonic and adult neuronal precursor cells, isolated from the central nervous system (CNS).

EUROMED-N is a basal medium and does not contain any growth or trophic factors, hormones and L-Glutamine; in combination with other supplements (such as N2, B27, G5 and NSS), this medium allows consistent growth and/or differentiation of neural cells.



Ordering information

Cat.No.	Description	Volume	Store
ECM0883L	EuroMed-N	500 ml	2-8°C

3

SALTS SOLUTIONS, REAGENT AND SUPPLEMENTS

Cell culture reagents are used in conjunction with cell culture media and sera. They provide essential nutrients for growth or maintenance during cell culture applications requiring bacteriological control, cell harvesting or other functions. We can offer you different products such as:

- ✓ Cell Dissociation Reagents
- ✓ Amino acids & Vitamins
- ✓ Antibiotics & Selection Agents
- ✓ Mycoplasma Detection & Prevention
- ✓ Freezing Medium

Salts Solutions

Euroclone balanced salts are carefully manufactured with exacting care to ensure high quality and long-term stability. Balanced salts are a combination of inorganic salts and normally a carbohydrate. They act as buffer to protect cells from sharp fluctuations in pH while maintaining the proper osmotic pressure across the cell membrane. In a complete medium, combined with glucose or other carbohydrate, balanced salts are essential for the growth and maintenance of cells in culture, providing the principle energy source for cell metabolism.

On their own, balanced salts in animal cell culture are generally used as a cell rinsing fluid for irrigation, washing, and dilution and for short-term maintenance while cells are manipulated outside a complete growth environment.

For applications where Ca^{2+} and Mg^{2+} ions interfere with enzyme activity (e.g. Trypsin), the modified buffers w/o Calcium w/o Magnesium are used. Among the most widely-used basal salt solutions for mammalian cell culture are Dulbecco's phosphate buffered saline (D-PBS); Earle's balanced salts solution (EBSS) and Hanks' balanced salts solution (HBSS).

Salts Solutions Preparation instructions and Storage Requirements

Salts are extremely hygroscopic and must be protected from atmospheric moisture. We recommend using the entire contents of each package immediately after opening.

We do not recommend preparing concentrates solutions of media or salts from a powdered base, due to the potential formation of insoluble salt complexes and precipitates. Supplements can be added prior to final preparation and filtration or added aseptically to the sterile solution.

Liquid 1x

Liquid 10x

Ordering information

Cat.No.	Description	Volume	Store
Liquid 1X			
ECB4055L	EARLE'S BALANCED SALTS SOLUTION w/o Calcium & Magnesium	500 ml	RT
ECB4006L	HANK'S BALANCED SALTS SOLUTION w/o Na Bicarbonate	500 ml	RT
ECB4007L	HANK'S BALANCED SALTS SOLUTION w/o Calcium& Magnesium	500 ml	RT
ECM0507L	HANK'S BALANCED SALTS SOLUTION w/o Calcium & Magnesium&Phenol Red	500 ml	RT
ECB5004L	Phosphate Buffered Saline w/o Calcium & Magnesium	500 ml	RT
ECB4053L	Dulbecco's Phosphate Buffered Saline	500 ml	RT
ECB4004L	Dulbecco's Phosphate Buffer Saline w/o Calcium w/o Magnesium	500 ml	RT
Liquid 10X			
ECM4055XL	EARLE'S BALANCED SALTS SOLUTION w/o Calcium & Magnesium 10X	500 ml	RT
ECM4006XL	ECM4006XL HANK'S BALANCED SALTS SOLUTION w/o Na Bicarbonate 10X	500 ml	RT
ECM4053XL	PHOSPHATE BUFFERED SALINE 10X	500 ml	RT
ECM4004XL	PHOSPHATE BUFFERED SALINE w/o Calcium & Magnesium 10X	500 ml	RT

Notes: multiple pack are available for several codes, please enquire

Reagent and Supplements

1. Cell Dissociation Reagents

When anchorage-dependent cultured cells reach high density or saturate the surface of the culture vessel, they undergo growth arrest and it is therefore necessary to detach them from their substrate. They have to be splitted into several subcultures, at cell concentrations that may vary according to the particular cell type. When manipulating a cell culture whose behaviour is unpredictable, it is worth not diluting them to a factor higher than 1:3 (distributing the total number of cells in a surface 3 times higher) during the early passages.

Trypsin

Trypsin is a porcine pancreas-derived enzyme that is commonly used for removing adherent cells from a culture surface. The concentration of trypsin necessary to detach cells from their substrate is dependent primarily on the cell type and the age of the culture. It is important to point out that the trypsin concentration suitable for many different cell types ranges from 0.5% to 0.01% (standard is 0.25%), since this enzyme breaks down cell surface proteins with possible damage to cell function when used at too high concentration or for long periods of time. The optimal pH for trypsin activity is 7-9. EDTA is added to trypsin solutions as a chelating agent that neutralizes calcium and magnesium ions that obscure the peptide bonds on which trypsin acts. Removing these ions increases the enzymatic activity.

Ordering information

Cat.No.	Description	Volume	Store
ECB3052D	Trypsin 0.05% - EDTA 0.02% in PBS w/o Ca, Mg and Phenol Red	100 ml	-20°C
ECM0920D	Trypsin 0.05% - EDTA 0.02% with Phenol Red	100 ml	-20°C
ECB3057D	Trypsin 0.25% -EDTA in HBSS w/o Ca&Mg with Phenol Red	100 ml	-20°C
ECB3051D	Trypsin 2.5% (w/v) in HBSS w/o Ca & Mg and Phenol Red	100 ml	-20°C

Notes: multiple pack are available for several codes, please enquire

Accutase® gentle solution for cell detachment

Accutase® is a gentle solution for cell detachment which has been developed to meet the most demanding requirements for gentle and effective detachment for adherent cells. It can also be used on suspension cells to reduce clumping in preparation for counting. Cell membranes and surface epitopes will not be damaged and the structural and functional quality of the surface proteins remains completely intact. The protease and collagenolytic activities maximize its applications from cell detachment to tissue dissociation.

Features

- Tested on: primary fibroblasts, endothelial cells, neurons, tumor cell lines and insect cells
- Maximum cell viability and enhanced plating efficiency
- Non-mammalian, non-bacterial origin: contamination risk reduced
- No neutralization required
- Activity: 610 ± 110 U/ml
- Liquid, ready to use.

Ordering information

Cat.No.	Description	Volume	Store
ECB3056D	Accutase® gentle solution for cell detachment	100 ml	-20°C

Euroclone recombinant Trypsin

Euroclone recombinant Trypsin is a highly pure and genetically engineered protein expressed in *E. Coli*; is a cell-dissociation enzyme that replaces porcine trypsin. Recombinant Trypsin eliminates the risk of viruses, or other potential adventitious agents found in animal derived components, free from contaminating enzymes and protease inhibitors. It is widely used in cell culture applications, insulin and vaccines manufacturing. Recombinant Trypsin is ideal for dissociating adherent cell lines in both serum containing & serum-free conditions.

Features

- Totally animal free.
- High purity (95%).
- For adherent cell lines in serum & serum-free conditions.
- Liquid, ready to use.

Ordering information

Cat.No.	Description	Volume	Store
ECB3053D	Recombinant Trypsin-EDTA 1X in PBS w/o Calcium w/o Magnesium w/o Phenol Red	100 ml	-20°C

2. Aminoacids & Vitamins

L-Glutamine

L-Glutamine is an unstable essential amino acid required in cell culture media formulations. Most commercially available media are formulated with free L-glutamine, included in the basal media or added to liquid formulations at time of use.

L-Glutamine is quite unstable in solution, as compared to other aminoacids: it is rapidly degraded producing ammonium ions. These degradation products can interfere and may cause damage to cell walls. Different factors may negatively affect its stability, for example temperature or pH. For this reason, solutions of L-Glutamine are usually kept in concentrated form at -20°C. Under these conditions it remains stable for several months and it should be added to the culture medium immediately before use, at a final concentration of 2 mM. It is highly recommended to split the 100 ml stock solution in aliquots and keep them frozen until necessary. Once in the culture medium, at the temperature used for cell cultivation, the conversion to glutamic acid is quite rapid (half-life is around 8-9 days), while, at 4°C, L-Glutamine remains 80-90% stable for 2-3 weeks.

It is therefore important to restore the L-Glutamine content in culture media kept at 4°C if the medium is not used within 15 days after preparation and to replace the medium in cell cultures to avoid damage to the cells.

Ordering information

Cat.No.	Description	Volume	Store
ECB3000D	L-Glutamine 100X (200 mM) Liquid – frozen	100 ml	-20°C

Notes: multiple pack are available for several codes, please enquire

Stable L-Glutamine

Stable L-Glutamine is a stable dipeptide form of L-Alanyl-L-glutamine.This dipeptide prevents degradation and ammonia build-up even during long-term cultures.

It can be substituted for L-Glutamine on an equimolar basis for most adherent and suspension cultures.

A cellular adaptation period is not required and growth of most cell types is comparable to what obtained with L-Glutamine.

Ordering information

Cat.No.	Description	Volume	Store
ECB3004D	Stable L-Glutamine 100X (200 mM) Liquid – frozen	100 ml	-20°C

L-Glutamine with Penicillin-Streptomycin

This ready liquid solution which provides at the same time bacteriostatic and bactericidal activity against gram negative and positive organisms. It is a broad-spectrum antibiotics and it also contains the essential amino acid L-Glutamine which is necessary for cell culture growth. Upon thawing, activity decreases rapidly.

Ordering information

Cat.No.	Description	Volume	Store
ECB3003D	L-Glutamine with Penicillin/Streptomycin 100X Liquid – frozen	100 ml	-20°C

Other Supplements

Vitamins and non-essential amino acids can be added to your basal medium.

The final concentration of the MEM or BME should be 1X to enrich it and then this medium is used as a classical MEM or BME.

Ordering information

Cat.No.	Description	Volume	Store
ECM0556D	MEM Vitamins Solution 100X Liquid – frozen	100 ml	-20°C
ECB3054D	Non-Essential Amino Acids 100X (NEAA) Liquid	100 ml	2-8°C

3. Other Reagents

Ordering information

Cat.No.	Description	Volume	Store
EK0041B	Colcemid 10 µg/ml in PBS Liquid	10 ml	2 - 8°C
ECM0970D	Distilled Water Sterile, Tissue Culture Tested Liquid	100 ml	RT
ECM0970L	Distilled Water Sterile, Tissue Culture Tested Liquid	500 ml	RT
ECM0180D	HEPES Buffer Solution 1M Liquid	100 ml	2 - 8°C
ECM0180L	HEPES Buffer Solution 1M Liquid	500 ml	2 - 8°C
ECM0543D	Potassium Chloride 0.075M Liquid	100 ml	RT
ECM0980D	Sodium Bicarbonate 7.5% Liquid	100 ml	2 - 8°C
ECM0542D	Sodium Pyruvate 100 mM	100 ml	-20°C
ECM0030D	Erythrocyte Lysis Buffer	100 ml	RT

4. Antibiotics & Selection Agents

Accidental contamination of a cell culture by bacteria, yeasts, fungi or mycoplasma leads to a rapid growth of the contaminating microorganism and to cell culture deterioration. To avoid this, all the handling procedures must be performed under aseptic conditions and usually a prophylactic use of antimicrobial agents is advantageous. When using antimicrobial agents in cell cultures, it is important to take into account their potential toxicity on the cells being cultured; it is therefore important to avoid high concentrations and to use these agents especially when there is a real risk of contamination, as is the case for primary cell cultures derived from surgical specimens. The stability of antimicrobial agents in culture is limited (half-life of a few days).

Therefore, in long-term cultures it is really necessary to frequently replace the culture medium with fresh medium. Different antibiotics-antimycotics have different mechanisms of action and also display variable spectrum of activity. The use of adequate mixtures of different antibiotics used at the same time is a good approach and minimizes the risk of antibiotic resistant microorganisms emergence.

Gentamycin Sulfate: Interferes with protein synthesis by binding to the 30S ribosomal subunit.

Penicillin G: Interferes with the late stages of assembly of bacterial cell walls.

Streptomycin Sulfate: Binds to the 30S ribosomal subunits leading to reading mistakes during protein synthesis.

Ordering information

Cat.No.	Description	Volume	Store
ECM0009D	Amphotericin B (Fungizone) 250 µg/ml, Liquid – frozen	100 ml	-20°C
ECM0010D	Antibiotic/Antimycotic Solution 100X, 25 mg/l Amphotericin B, 10.000 U/ml penicillin, 10.000 mg/l streptomycin, Liquid – frozen	100 ml	-20°C
ECM0012B	Gentamycin Solution (50mg/ml), liquid-frozen	10 ml	-20°C
ECM0012D	Gentamycin Solution (50mg/ml), liquid-frozen	100 ml	-20°C
ECM0015C	G-418 (Geneticin) Solution (50 mg/ml), Liquid – frozen	20 ml	-20°C
ECM0015D	G-418 (Geneticin) Solution (50 mg/ml), Liquid – frozen	100 ml	-20°C
ECM0015K	G-418 Sulphate, Powder	10 gr	RT
ECM0011B	Gentamycin Solution (10 mg/ml), Liquid – frozen	10 ml	-20°C
ECM0011D	Gentamycin Solution (10 mg/ml), Liquid – frozen	100 ml	-20°C
ECB3001D	Penicillin/Streptomicin Solution 100X, 10.000 U/ml penicillin, 10.000 mg/l streptomycin, Liquid – frozen	100 ml	-20°C

5. Mycoplasma Detection & Prevention

N-GARDE Mycoplasma PCR Reagent set

N-GARDE Mycoplasma PCR Reagent set is designed to detect the presence of Mycoplasma contaminating biological materials, such as cultured cells. Mycoplasma detection by the direct culture procedure is time-consuming and some Mycoplasma species are difficult to cultivate. With Mycoplasma PCR testing, results are obtained within a few hours, since the presence of contaminant Mycoplasma can be easily detected simply by verifying the bands of amplified DNA fragments by electrophoresis.

A ready-to-use, optimized PCR mix is supplied. The reaction mix in the Mycoplasma detection kit contains a precipitant for direct loading of PCR products onto agarose gel. The primer set allows detection of various Mycoplasma species (M. fermentans, M. hyorhinis, M. arginini, M. orale, M. salivarium, M. hominis, M. pulmonis, M. arthritidis, M. bovis, M. pneumoniae, M. pirum and M. capricolum), as well as Acholeplasma and Spiroplasma species, with high sensitivity and specificity. N-GARDE Mycoplasma PCR Reagent set is based on a simple assay protocol and has the following advantages:

- Highly sensitive Mycoplasma-specific primers with broad range
- Convenient and user-friendly: supplied with complete reaction mix (with Taq polymerase)
- Requires no more than 10-20 minutes of hands-on work
- Samples are easy to prepare
- Results are easily determined with a single PCR process
- Rapid: results obtained in no more than 5 hours
- No need for internal control application steps
- No loading dye needed for the agarose gel

Ordering information

Cat.No.	Description	Volume	Store
EMK090020	N - GARDE Mycoplasma PCR Reagent set PCR kit for Mycoplasma Detection	20 react.	-20°C

Mycoplasma Removal Agent

Accidental contamination of a cell culture by bacteria, yeasts, fungi or mycoplasma leads to a rapid growth of the contaminating microorganism and to deterioration of the cell culture. Mycoplasma Removal Agent (MRA) has been specifically developed for cell culture.

This agent has been shown to be effective in the elimination of various mycoplasma from contaminated cultures and it is suitable to prevent recontamination of cured cultures. MRA shows strong anti-mycoplasma activity against various type of mycoplasma: Mycoplasma orale, Mycoplasma arginini, Mycoplasma hyorhinis, A. laidlawii e Mycoplasma salivarium.

The low concentration of use (0.5 µg/ml) means no or minimal cytotoxicity. If cells are treated with MRA, recontamination of that culture with the original mycoplasma is not detected while preventive doses of MRA are in use. MRA is convenient to use: simply add it to the Mycoplasma contaminated cultures and incubate for only 7 days.

Ordering information

Cat.No.	Description	Volume	Store
ECMC210A	Mycoplasma Removal Agent	5 ml	RT

6. Freezing Medium

EuroMed Freezing Medium II

EuroMed II is a classical cryoprotective medium intended for cryogenic and preservation storage for standard cell lines. Freezing medium II contains DMSO which avoids destructive ice formation during freezing procedure and FBS to minimize dehydration effects and to improve viability of cells after thawing.

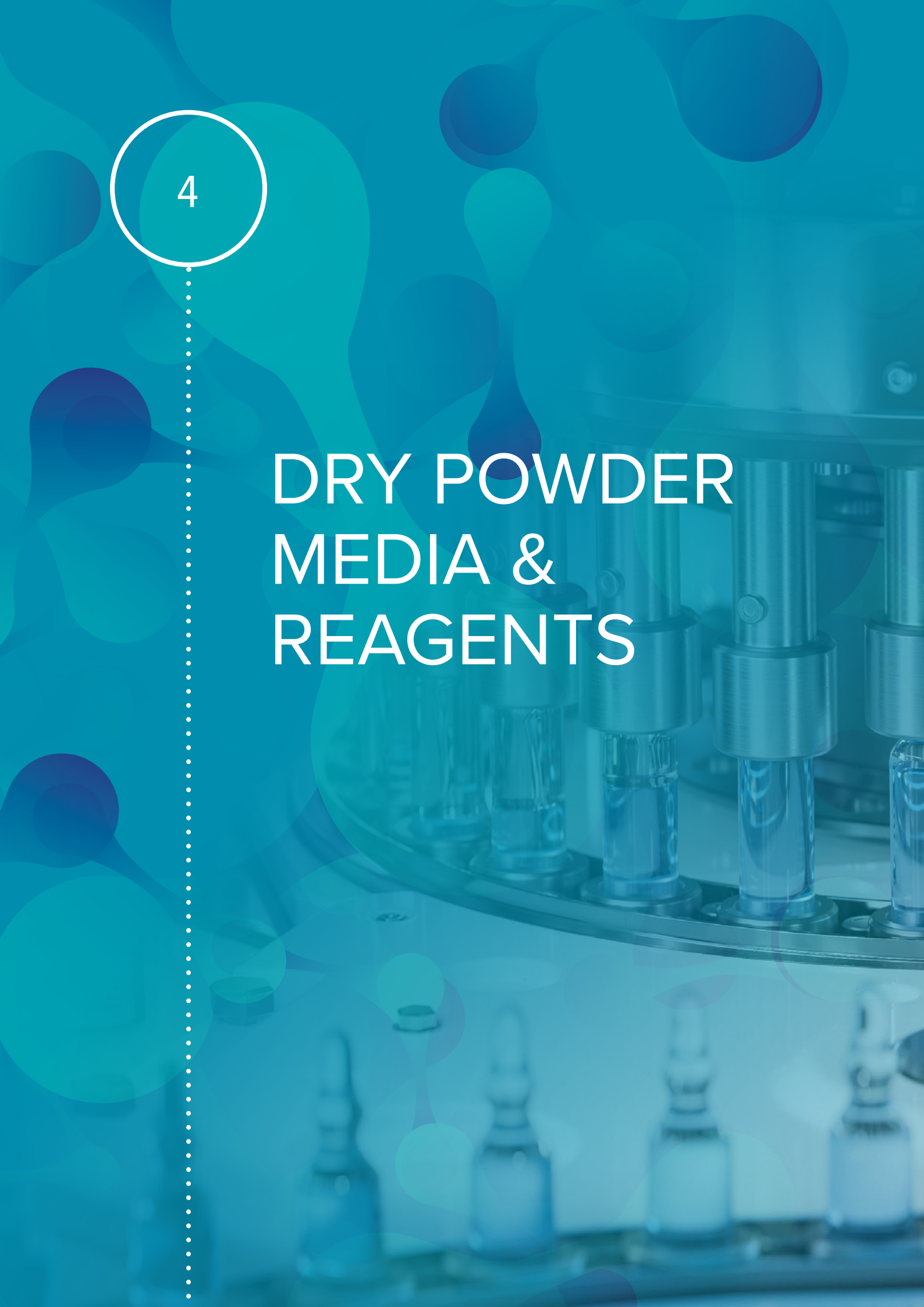
It is a ready-to-use solution which has been developed to preserve a wide variety of cell types during storage in liquid nitrogen.

Ordering information

Cat.No.	Description	Volume	Store
ECM0628N	EUROMED freezing II	50 ml	-20°C

4

DRY POWDER MEDIA & REAGENTS



Dry Powder Media & Reagents

Euroclone offers a large range of Dry Powder solutions of cell culture media, buffers, antibiotics and reagents, as well as custom-made formulations for specific applications, using its outstanding knowledge of cell culture products.

Euroclone offers highest quality and premium service, ability to address special requirements and full traceability and security. All processes are thoroughly validated to ensure that our products meet quality standards and relevant guidelines.

Euroclone media formulations are manufactured following original publications, standards set by the Tissue Culture Association and accepted formulations.

Manufacturing Methods, Facilities and Validation

All manufacturing equipment used for dry powder are composed of chemically inert materials to avoid contaminating the final product.

Euroclone produces cell culture media and reagents respecting strict environmental regulations regarding sanitary conditions and moisture. Humidity and temperature are constantly monitored to guarantee that all chemicals are ground into a fine powder.

All manufacturing processes and facilities are qualified and validated to ensure consistency and suitability for intended use. The intended use of Euroclone dry powder media and reagents for cell culture is for research applications, and Further Manufacturing (FFM), not for diagnostic or clinical use. It is the end user's responsibility to qualify these products for their specific application.

The Euroclone Validation Group plans and supervises the qualification of key production equipment and production processes, following relevant current guidelines and ISO 9001:2015/ ISO 13485:2021.

Raw Materials

Chemicals used to manufacture Euroclone dry powder media, salt mixtures and reagents are of the highest purity commercially available. All chemicals conform, where applicable, to the published standards of the American Chemical Society (ACS), European Pharmacopeia (EP) or the United States Pharmacopeia (USP).

Euroclone's quality assurance program includes in-coming raw material testing for identification and purity. Certificates of Analysis from vendors or manufacturers are required to support identity, purity, safety and performance claims.

Quality control and Testing

Every batch produced of Powder Media, salt solutions and ancillary reagents undergo to a physical-chemical screening to assess level of several parameters, like Osmolality, Endotoxin, pH and others, following European Pharmacopeia guidelines.

Euroclone analyses representative samples of the mixture's chemical composition and homogeneity to verify the concentration of glucose or sodium.

Results are reported on a "Lot specific" CoA; customization of tests is always possible, please inquire for more info.

Storage and handling

Powder products can be stored at different conditions (Room Temperature, 2-8°C or -20°C) according to specific indication reported on label.

Also the expiration date of each product is reported on the label.

Standard formulas are available in lot sizes up to 10000 liters; format available are 1 L, 5 L, 10 L, 50 L, 100 L.

Our production can customize reagents formulations and packaging according to the specific requests of the projects.

Please inquire about the possibilities!

Dulbecco's Modified Eagle's Medium

Dulbecco's Modified Eagle's Medium contains a four-fold increase in the concentration of amino acids and vitamins found in Eagle's Basal Medium (BME). DME media were originally developed for use with a serum supplement in a 10% CO_2 atmosphere for the culture of non-transformed mouse and chicken cells. DMEM and its modifications are widely used to support the growth of a broad spectrum of mammalian cells.

There are two types of DMEM: one with a high glucose content (4.5 g/L), and the other with a low glucose content (1.0 g/L).

DMEM High Glucose

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0102A1	DMEM High Glucose w/ L-Glutamine w/ Sodium Pyruvate	1 L	2-8°C	3,7
ECM0102A5	DMEM High Glucose w/ L-Glutamine w/ Sodium Pyruvate	5 L	2-8°C	3,7
ECM0102A10	DMEM High Glucose w/ L-Glutamine w/ Sodium Pyruvate	10 L	2-8°C	3,7
ECM0102A50	DMEM High Glucose w/ L-Glutamine w/ Sodium Pyruvate	50 L	2-8°C	3,7
ECM0103A1	DMEM High Glucose w/ L-Glutamine w/o Sodium Pyruvate	1 L	2-8°C	3,7
ECM0103A5	DMEM High Glucose w/ L-Glutamine w/o Sodium Pyruvate	5 L	2-8°C	3,7
ECM0103A10	DMEM High Glucose w/ L-Glutamine w/o Sodium Pyruvate	10 L	2-8°C	3,7

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

DMEM Low Glucose

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0061A1	DMEM Low Glucose w/ L-Glutamine w/ Sodium Pyruvate	1 L	2-8°C	3,7
ECM0061A5	DMEM Low Glucose w/ L-Glutamine w/ Sodium Pyruvate	5 L	2-8°C	3,7
ECM0061A10	DMEM Low Glucose w/ L-Glutamine w/ Sodium Pyruvate	10 L	2-8°C	3,7

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

DMEM & Ham's F12

Dulbecco's MEM/F-12 is a 1:1 mixture of Dulbecco's Modified Eagle's medium, (DME) and Ham's F-12 nutrient mixture. This mixture is used for supporting the growth of a broad spectrum of mammalian cells (epithelial, endothelial...), even in serum-free conditions, in combination with growth factors and hormones.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0095A1	DMEM - F12 w/ L-Glutamine w/ 15 mM Hepes	1 L	2-8°C	1,2
ECM0095A10	DMEM - F12 w/ L-Glutamine w/ 15 mM Hepes	10 L	2-8°C	1,2

Notes:

- *When Medium contains L-Glutamine is reported "w/ L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Ham's Nutrient Mixture F10

Nutrient Mixture F-10 Ham's (Ham's F-10) is used for the growth of Chinese Hamster Ovary cells (CHO). Supplemented with standard or dialyzed serum or in combination with hormones and growth factors, Ham's F-10 is widely used for the growth of a broad spectrum of mammalian Cells.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0146A1	Ham's F10 w/ L-Glutamine	1 L	2-8°C	1,2
ECM0146A5	Ham's F10 w/ L-Glutamine	5 L	2-8°C	1,2
ECM0146A10	Ham's F10 w/ L-Glutamine	10 L	2-8°C	1,2
ECM0146A50	Ham's F10 w/ L-Glutamine	50 L	2-8°C	1,2

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Ham's Nutrient Mixture F12

Nutrient mixture F-12 Ham's (Ham's F-12) was originally designed for the serum-free growth of Chinese Hamster ovary, lung cells and mouse L-cells. It is the medium of choice for supporting the growth of cells of rodent origin (like rabbit and rat) and has proved to be an excellent cloning medium for the culture of myeloma and hybrid cells (hybridomas).

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0134A1	Ham's F12 w/ L-Glutamine	1 L	2-8°C	1,176
ECM0134A5	Ham's F12 w/ L-Glutamine	5 L	2-8°C	1,176
ECM0134A10	Ham's F12 w/ L-Glutamine	10 L	2-8°C	1,176
ECM0134A50	Ham's F12 w/ L-Glutamine	50 L	2-8°C	1,176

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Minimum Essential Medium (MEM)

Minimum Essential Medium (MEM) was developed by Harry Eagle as a modification of his BME medium containing a higher concentration of essential nutrients. MEM is a non-complex medium well suited for a wide range of mammalian cells when used with a serum supplement.

MEM with Earle Basal Salt Solution (MEM/EBSS) is designed for use in a 5% CO_2 atmosphere.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0450A1	MEM w/ Earle's Salts w/ L-Glutamine w/ NEAA	1 L	2-8°C	2,2
ECM0450A5	MEM w/ Earle's Salts w/ L-Glutamine w/ NEAA	5 L	2-8°C	2,2
ECM0450A10	MEM w/ Earle's Salts w/ L-Glutamine w/ NEAA	10 L	2-8°C	2,2
ECM0450A50	MEM w/ Earle's Salts w/ L-Glutamine w/ NEAA	50 L	2-8°C	2,2
ECM0451A1	MEM w/ Earle's Salts w/ L-Glutamine w/o NEAA	1 L	2-8°C	0,35
ECM0451A5	MEM w/ Earle's Salts w/ L-Glutamine w/o NEAA	5 L	2-8°C	0,35
ECM0451A10	MEM w/ Earle's Salts w/ L-Glutamine w/o NEAA	10 L	2-8°C	0,35
ECM0451A50	MEM w/ Earle's Salts w/ L-Glutamine w/o NEAA	10 L	2-8°C	0,35
ECM0452A1	MEM w/ Earle's Salts w/ L-Glutamine w/ 25mM Hepes	1 L	2-8°C	
ECM0452A10	MEM w/ Earle's Salts w/ L-Glutamine w/ 25mM Hepes	10 L	2-8°C	

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

MEM-Alpha Modification

MEM Alpha is a modification of MEM that contains non-essential amino acids, sodium pyruvate, thioctic acid, vitamin B12, biotin, and ascorbic acid. MEM Alpha can be used with a variety of suspension and adherent mammalian cells.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0440A1	MEM Alpha Modification w/ Earle's Salts w/ L-Glutamine	1 L	2-8°C	2,2
ECM0440A5	MEM Alpha Modification w/ Earle's Salts w/ L-Glutamine	5 L	2-8°C	2,2
ECM0440A10	MEM Alpha Modification w/ Earle's Salts w/ L-Glutamine	10 L	2-8°C	2,2
ECM0440A50	MEM Alpha Modification w/ Earle's Salts w/ L-Glutamine	50 L	2-8°C	2,2

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Medium 199

Medium 199 is one of the first chemically defined media used without a serum supplement for the continuous growth of primary chicken embryo heart and fibroblast cells.

Nowadays 199 media are widely used for the maintenance of non-transformed cells, vaccine and virus production and primary explants of epithelial cells. The media can be formulated either with Earle salts or Hanks Salts. Medium 199 with Earle's is optimized for 5-10% CO_2 atmosphere. Medium 199 with Hanks salts are buffered with saline solutions designed for balancing in ambient conditions.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0420A1	Medium 199 w/ Earle's Salts w/ L-Glutamine	1 L	2-8°C	2,2
ECM0420A5	Medium 199 w/ Earle's Salts w/ L-Glutamine	5 L	2-8°C	2,2
ECM0420A10	Medium 199 w/ Earle's Salts w/ L-Glutamine	10 L	2-8°C	2,2
ECM0420A50	Medium 199 w/ Earle's Salts w/ L-Glutamine	50 L	2-8°C	2,2
ECM0425A1	Medium 199 w/ Earle's Salts w/ L-Glutamine w/ 25 mM Hepes	1 L	2-8°C	2,2
ECM0425A10	Medium 199 w/ Earle's Salts w/ L-Glutamine w/ 25 mM Hepes	10 L	2-8°C	2,2
ECM0425A50	Medium 199 w/ Earle's Salts w/ L-Glutamine w/ 25 mM Hepes	50 L	2-8°C	2,2
ECM0410A1	Medium 199 modified w/ Hanks' Salts	1 L	2-8°C	0,35
ECM0410A10	Medium 199 modified w/ Hanks' Salts	10 L	2-8°C	0,35
ECM0410A50	Medium 199 modified w/ Hanks' Salts	50 L	2-8°C	0,35

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

RPMI 1640 Medium

RPMI 1640 medium was developed by Moore at Roswell Park Memorial Institute, hence the acronym RPMI. Originally designed for the growth of human leukemia cells in monolayer or suspension cultures using a serum supplement, it has since demonstrated universal use in the growth and support of a broad spectrum of mammalian and hybridoma cells, including human myeloma, human leukocytes, and B and T lymphocytes

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0860A1	RPMI 1640 w/ L-Glutamine	1 L	2-8°C	2,0
ECM0860A5	RPMI 1640 w/ L-Glutamine	5 L	2-8°C	2,0
ECM0860A10	RPMI 1640 w/ L-Glutamine	10 L	2-8°C	2,0
ECM0860A50	RPMI 1640 w/ L-Glutamine	50 L	2-8°C	2,0
ECM0860A100	RPMI 1640 w/ L-Glutamine	100 L	2-8°C	2,0
ECM0870A1	RPMI 1640	1 L	2-8°C	2,0

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0870A10	RPMI 1640	10 L	2-8°C	2,0
ECM0870A50	RPMI 1640	50 L	2-8°C	2,0
ECM0871A1	RPMI 1640 w/o Phenol Red	1 L	2-8°C	2,0
ECM0871A10	RPMI 1640 w/o Phenol Red	10 L	2-8°C	2,0
ECM0871A50	RPMI 1640 w/o Phenol Red	50 L	2-8°C	2,0
ECM0876A1	RPMI 1640 w/ L- Glutamine w/ 25 mM Hepes w/o Phenol Red	1 L	2-8°C	2,0
ECM0876A10	RPMI 1640 w/ L- Glutamine w/ 25 mM Hepes w/o Phenol Red	10 L	2-8°C	2,0
ECM0876A50	RPMI 1640 w/ L- Glutamine w/ 25 mM Hepes w/o Phenol Red	50 L	2-8°C	2,0
ECM0880A1	RPMI 1640 w/ L-Glutamine w/o Phenol Red	1 L	2-8°C	2,0
ECM0880A10	RPMI 1640 w/ L- Glutamine w/o Phenol Red	10 L	2-8°C	2,0
ECM0880A50	RPMI 1640 w/ L-Glutamine w/o Phenol Red	50 L	2-8°C	2,0
ECM0883A1	RPMI 1640 w/ L-Glutamine w/o Glucose	1 L	2-8°C	2,0
ECM0883A10	RPMI 1640 w/ L-Glutamine w/o Glucose	10 L	2-8°C	2,0

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Iscove's Modified Dulbecco's Medium (IMDM)

Iscove's Modified Dulbecco's Medium (IMDM) is a modification of DMEM high glucose (4500 mg/l). It contains sodium pyruvate and additional amino acids, HEPES buffer, selenium and other components.

IMDM was originally designed for the serum-free growth of primary hematopoietic cells when properly supplemented. When used in conjunction with serum, IMDM supports the growth of a broad spectrum of mammalian cells, is ideal for rapidly proliferating high density cell cultures in a 5% CO_2 atmosphere.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0191A1	Iscove's Modified DMEM w/ L-Glutamine w/ 25 mM Hepes	1 L	2-8°C	3,024 g/L
ECM0191A10	Iscove's Modified DMEM w/ L-Glutamine w/ 25 mM Hepes	10 L	2-8°C	3,024 g/L
ECM0191A50	Iscove's Modified DMEM w/ L-Glutamine w/ 25 mM Hepes	50 L	2-8°C	3,024 g/L
ECM0192A1	Iscove's Modified DMEM w/ L-Glutamine w/ 25 mM Hepes w/o Phenol Red, w/Sodium Bicarbonate	1 L	2-8°C	
ECM0192A10	Iscove's Modified DMEM w/ L-Glutamine w/ 25 mM Hepes w/o Phenol Red, w/Sodium Bicarbonate	10 L	2-8°C	

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Leibovitz L-15 Medium

The Leibovitz L-15 media were formulated to promote the cell growth in CO_2 free systems without Sodium Bicarbonate buffer. The formulations were developed with the sodium bicarbonate buffer. The Leibovitz L-15 media are buffered by a complement of salts, free base amino acids and galactose, so they can be used under conditions of free gaseous exchange with the atmosphere. When properly supplemented, L-15 Medium supports established cell lines, such as HEp-2 and LLC-MK2, as well as primary explants of embryonic and adult human.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0350A1	Leibovitz L15 Medium w/ L-Glutamine	1 L	2-8°C	
ECM0350A5	Leibovitz L15 Medium w/ L-Glutamine	5 L	2-8°C	

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0350A10	Leibovitz L15 Medium w/ L-Glutamine	10 L	2-8°C	

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Glasgow MEM

Glasgow's MEM (GMEM) was originally developed by McPherson and Stoker as a modification of Eagle's Minimal Essential Medium, to be used for studying the genetic factors that affected cell competence. Glasgow's MEM was developed for use with adherent kidney cell lines, such as baby hamster kidney cells (BHK-21).

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0120A1	Glasgow MEM BHK21 w/ L-Glutamine w/o Tryptose Phosphate Broth	1 L	2-8°C	3,024 g/L
ECM0120A10	Glasgow MEM BHK21 w/ L-Glutamine w/o Tryptose Phosphate Broth	10 L	2-8°C	3,024 g/L
ECM0120A50	Glasgow MEM BHK21 w/ L-Glutamine w/o Tryptose Phosphate Broth	50 L	2-8°C	3,024 g/L

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

CMRL 1066

This medium was originally developed by Connaught Medical Research Laboratories (CMRL) for the growth of L-strain cells under serum-free conditions. CMRL medium is also useful for cloning monkey kidney cells and for growing many other mammalian cell lines when supplemented with serum.

Cat.No.	Description	Powder for	Store	$NaHCO_3$ to add (ECA2060) g/L
ECM0058A1	CMRL 1066 w/ L-Glutamine	1 L	2-8°C	2,2 g/L
ECM0058A5	CMRL 1066 w/ L-Glutamine	5 L	2-8°C	2,2 g/L
ECM0058A10	CMRL 1066 w/ L-Glutamine	10 L	2-8°C	2,2 g/L

Notes:

- *When Medium contains L-Glutamine is reported "with L-Glutamine"*
- *When Medium does not contain Phenol Red is reported "w/o Phenol Red"*

Salts Solutions, Reagent and Supplements

Cat.No.	Description	Powder for	Store
Salts Solutions			
ECB0750A1	Dulbecco's Phosphate Buffered Saline w/o Calcium w/o Magnesium	1 L	RT
ECB0750A5	Dulbecco's Phosphate Buffered Saline w/o Calcium w/o Magnesium	5 L	RT
ECB0750A10	Dulbecco's Phosphate Buffered Saline w/o Calcium w/o Magnesium	10 L	RT
ECB0750A50	Dulbecco's Phosphate Buffered Saline w/o Calcium w/o Magnesium	50 L	RT
ECB0750A100	Dulbecco's Phosphate Buffered Saline w/o Calcium w/o Magnesium	100 L	RT
ECB0153A1	Hanks' Balanced Salts w/o Ca w/o Mg w/o Phenol Red	1 L	RT
ECB0153A10	Hanks' Balanced Salts w/o Ca w/o Mg w/o Phenol Red	10 L	RT
ECB0154A1	Hanks' Balanced Salts w/ Calcium w/ Magnesium w/ Phenol Red	1 L	RT
ECB0154A10	Hanks' Balanced Salts w/ Calcium w/ Magnesium w/ Phenol Red	10 L	RT
ECB0154A50	Hanks' Balanced Salts w/ Calcium w/ Magnesium w/ Phenol Red	50 L	RT
Cell Dissociation Reagents			
ECA5957A100	Trypsin 1:250 (porcine)	100 g	-20°C
ECA5957A500	Trypsin 1:250 (porcine)	500 g	-20°C
ECA5957A1	Trypsin 1:250 (porcine)	1 kg	-20°C
Antibiotics			
ECA4020A1	Gentamicin Sulfate	1 g	2-8°C
ECA4020A5	Gentamicin Sulfate	5 g	2-8°C
ECA4030A250	Amphotericin B	250 mg	2-8°C
ECA4030A1	Amphotericin B	1 g	2-8°C
ECA4030A5	Amphotericin B	5 g	2-8°C
Amminoacids			
ECA1012A100	L-Glutamine	100 g	RT
ECA1012A500	L-Glutamine	500 g	RT
ECA1012A1	L-Glutamine	1 Kg	RT
ECA1031A10	L-Alanyl-L-Glutamine. Stable Glutamine	10 g	RT
ECA1031A100	L-Alanyl-L-Glutamine. Stable Glutamine	100 g	RT
Other Reagents			
ECA5030A500	D-Glucose Monohydrate (Dextrose). cell culture tested	500 g	RT
ECA5030A1	D-Glucose Monohydrate (Dextrose). cell culture tested	1 Kg	RT
ECA5455A100	HEPES. cell culture tested	100 g	RT
ECA5455A250	HEPES. cell culture tested	250 g	RT
ECA5455A500	HEPES. cell culture tested	500 g	RT
ECA5455A1	HEPES. cell culture tested	1 Kg	RT
ECA5648A10	Phenol Red Sodium Salt	10 g	RT
ECA2035A500	Potassium Chloride	500 g	RT
ECA2035A1	Potassium Chloride	1 Kg	RT
ECA2060A500	Sodium Bicarbonate. cell culture tested	500 g	RT
ECA2060A1	Sodium Bicarbonate. cell culture tested	1 Kg	RT
ECA2064A5	Sodium Chloride (for dilution 9 g/l)	X 5 L	RT
ECA2066A1	Sodium Chloride	1 Kg	RT
ECA6154A100	Bovine Serum Albumin (BSA)	100 g	2-8°C
ECA6154A500	Bovine Serum Albumin (BSA)	500 g	2-8°C
ECA6154A1	Bovine Serum Albumin (BSA)	1 Kg	2-8°C

5

CELL BIOLOGY PLASTICWARE

Primo® Cell Culture Consumable, Microplates, Mechanical Pipettes and Tips

Primo® is the new series of products developed by Euroclone to satisfy high demanding scientists' needs.

Our products are compatible with the main Cellular Biology techniques. The entire line of Primo®'s product is manufactured in 100,000 grade clean-room environment under a ISO 9001-2008 and ISO 13845 Quality System.

Primo® Cell Culture products are manufactured with 100% USP VI crystal class virgin polystyrene and high quality polyethylene to ensure optimal surface for your cells.

✓ Primo® Flasks and Plates are vacuum-plasma treated to create a negatively charged and hydrophilic surface; this treatment ensures a more even and consistent cell attachment together with optimal cell growth

✓ Primo® Pet pipettes are transparent, sterile, graduated polystyrene serological pipettes for dispensing biological material in general. Color coded for fast recognition and calibrated graduation +/-1% for accurate dispensing

✓ Primo® Erlenmayer Flasks are sterile, graduated, transparent polycarbonate flask suitable for high oxygen demand cell lines cultures, stirred or suspended cultures, animal, vegetable, fungal or bacterial cultures

✓ The pipettor Primo® Eco-Logik, thanks to its unique features, is an essential tool for all laboratories. The main features are: LED display that shows the charge status and set flow rate, adjustable aspiration and dispensing speed, electronic braking system (EBS™), and long-lasting rechargeable lithium battery, which allows for 8 hours of continuous operation on a full charge. The pipettor is equipped with accessories that enhance its handness and can be uses with plastic or glass pipettes from 0.1 to 100 ml.

For more information, you can download our new catalog Cell Culture Plasticware

6

TECHNICAL APPENDIX

Technical TIPS and curiosity

Thaw serum

Remove the serum from frozen storage and place it overnight in a refrigerator at 2°C to 8°C.

Transfer the bottles to a 37°C water bath.

Swirl the bottles from time to time in order to mix the solutes that tend to concentrate at the bottom of the bottle. Do not keep the serum at 37°C any longer than necessary to completely thaw it.

Thawing serum in a bath above 40°C without mixing may lead to the formation of a precipitate inside the bottle. We don't recommend thawing the serum at high temperature.

Deposits in the serum

The procedures used to prepare serum may retain some fibrinogen. Since external factors may initiate the conversion of fibrinogen to fibrin, flocculent material or turbidity may be observed after thawing or heat inactivation.

Testing of serum after this has happened indicates that it does not alter its ability to function as a supplement for cell culture media; it is recommended to use the serum without treatment (filtration or centrifugation) but if the presence of flocculent material or turbidity is a concern, it can be removed by filtration through a 0.45 µm filter A precipitate can form in serum that is incubated at 37°C for prolonged periods of time.

Electron microscopy and X-ray microanalysis indicate that the precipitate may include crystals of calcium phosphate.

The formation of calcium phosphate precipitate does not alter the performance of the serum as a supplement for cell Culture.

Serum Heat Inactivation

For most cell culture applications, heat inactivation of serum is not recommended, it degrades complement proteins that may interfere with immunological assays. Heating serum for prolonged periods of time can reduce or destroy growth factors, as well as increase the formation of deposits which are commonly mistaken for microbial contamination.

When heat inactivation is needed, follow this protocol:

- Thaw the serum and the control serum bottle at 2-8°C.
- Stir the bottled serum to avoid a precipitant from forming during the thawing, then place it in - the water bath adjusted to 80°C.
- Once the control bottle temperature reaches 50°C, adjust the bath thermostat to 70°C; when the bottle temperature reaches 55°C, change the thermostat to 60°C.
- When the serum reaches the temperature of 56°C, use a timer (30 minutes is the registered time) and change the thermostat of the water bath to 56°C. During those 30 minutes, check the temperature regularly and maintain it stable by adjusting the thermostat, by adding some cold water, and by lowering the lid or not. Stir the serum every 5 to 10 minutes.
- Keep the serum at room temperature for 30 minutes, and then freeze the serum at -20°C.

Is possible to store serum between +2 to +8°C?

Serum may be stored between +2 to +8°C for up to 8 weeks without diminishing its performance.

Art to Science, Vol.19, No.2, "Serum Stability at Refrigerated Temperatures (2-8°C).

Relation between FBS origins and quality

The serum's origin has no influence on cell growth. When compared cell growth in FBS from several different countries on three continents, was confirmed that regardless of the country of origin, all cell lines tested had the same average performance. One batch of FBS may work well for one specific cell line, but not for another. "Serum quality" is specific for each cell line. That is why testing of FBS is widely used when dealing with sensitive cell lines.

FBS regulations

USDA approved FBS is produced from blood collected in countries that have been approved for exporting beef products into the United States. These restrictions are imposed, not for the quality of FBS but mainly because of the animal health status in the exporting country. Among these countries we find Australia, Canada, Chile, Costa Rica, Honduras, Iceland, Japan, Mexico, New Zealand, Nicaragua, and Uruguay.

EU approved FBS is produced from blood collected in countries that have been approved for exporting beef products into European Union according to the Commission Regulations 1609/2009/EC e 142/2011/EC. Currently this includes Central and South America, USA, Canada, Australia; new Zeland a South Africa.

Gamma Irradiation of FBS

Treatment of materials with Gamma irradiation is a common process used in medical and pharmaceutical applications. The Gamma rays induce the formation of super reactive hydroxy radicals which inactivate most microorganisms present in a substance by damaging or destroying their nucleic acids.

The use of animal-derived products (FBS) carries a risk of contamination by microorganisms like bacteria, viruses, mycoplasma and fungi. All animal-derived materials we produce are deeply screened for such contaminants according to strict regulations, but very low levels may exist, below the threshold of detection for current test methods.

For this reason, the Gamma irradiation process is chosen to provide greater assurance that any existing low-level of contamination by microorganisms will be reduced and that the risks associated with animal-derived components are minimized.

Moreover, the Gamma irradiation process does not produce any negative side effect on the products, no difference in performances is noticed when compared to non-irradiated controls.

Today, FBS producers are concerned about proper doses of irradiation needed to inactivate the viruses listed in 9 CFR 113.46-53, and also about effective doses to inactivate other smallest-sized viruses, without adversely affecting the quality of the serum.

Why Trypsin products do not always have the same color?

Some preparations of trypsin contain phenol red. Since the product is shipped with dry ice, there could be a significant CO_2 build up in packaging. This CO_2 may enter the solution and lower the pH slightly, giving an orange (around pH 6.5) vs. pinkish (around 7.3) color. The solution, if orange (acidic) can still be good to use as is, or sodium hydroxide may be added to adjust the pH.

Services

Our services are designed to support the daily activities of researchers, offering flexible and customized solutions to meet the specific needs of our clients.

Stockroom

Stockroom is a storage system for products distributed by Euroclone, located directly at facilities such as universities or hospitals. Researchers can easily access items, taking what they need. Each month, a summary of withdrawals is provided, and the corresponding order is processed, with stocks levels automatically replenished based on actual consumption. The list of available products is fully customizable and can be modified at any time.

My Smart Orders

The **My Smart Orders** service allows customers to place orders online through a dedicated portal, simplifying the purchasing process and ensuring compliance with MEPA (Electronic Market of Public Administration) requirements. Customers can benefit from personalized annual conditions and offers. The ordering procedure is adaptable to the specific needs of each client.

Annual Orders

Annual orders with planned delivery scheduling prevent issues and delays, ensuring the customer a consistent and timely supply of products in the required quantities and timeframes.

Technical Sales Specialist

Euroclone specialists offer direct support throughout Italy for both Euroclone-branded and distributed products, providing:

- ✓ Pre- and post-sales technical consultancy
- ✓ Instrument installation
- ✓ Training on instrument use
- ✓ Technical and practical demonstrations
- ✓ Scientific support

Technical Sales Assistant

The in-house technical assistant manages all pre- and post-sales needs, offering:

- ✓ Technical information
- ✓ Request management in collaboration with supplier's technical support
- ✓ Technical support for optimizing the use of consumables

Contacts: tsa@euroclone.it / 800-315911

Quality

The *in vitro* diagnostic medical devices we market comply with European Regulation 2017/746/EU. Euroclone-branded products are sold in Europe and non-European countries, in accordance with international regulations, including the DUAL USE regulation. Euroclone is a supplier for companies in the Biotech - Pharma area operating in GMP, ensuring FFM products in compliance with specific quality technical agreements defined with customers.

Certifications

UNI EN ISO 9001: Development, production, and marketing of products and consumables for cytogenetics, cell biology, and molecular biology. Marketing and technical assistance of equipment, products, and consumables for the medical, biotechnological (cell biology, molecular biology, immunology, proteomics, NGS), and contamination control sectors.

UNI EN ISO 13485: Design, development, production, technical assistance, and marketing of *in vitro* diagnostics. Marketing of medical devices.

UNI EN ISO 14001: Marketing and technical assistance of equipment, products, and consumables for the medical, biotechnological, diagnostic (cytogenetics, cell biology, molecular biology, immunology, proteomics, NGS), and contamination control sectors.

Notes

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- Car-T
- Sferoidi
- Epigenetica
- Single Cell
- NGS 6.0
- Processi Cellulari
- Sample Preparation
- SARS-CoV-2
- Produzione Terapie Cellulari
- Produzione Proteine Ricombinanti
- Drug Discovery

Some of the brands mentioned in the guides are available through Euroclone only in Italy.


GUIDA AL MONDO DEGLI ESOSOMI
GUIDA AL MONDO NGS 6.0
GUIDA AL MONDO EPIGENETICA
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