

InVitroCare Inc.

IVF Media Products
... for the Next Generation

Product Catalog

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InVitroCare Inc Product Catalog



InVitroCare, Inc provides a full range of ART products, including a complete line of embryo culture media for use in IVF applications, a comprehensive array of andrology products for sperm preparation and freezing, and a series of pre-measured, ready to use sperm isolation products for Doctor's office IUI procedures.

Our IVC Media series is designed to support embryo growth at each stage of development providing maximum flexibility in managing the assisted reproductive process. InVitroCare® has almost twenty years experience in providing consistently high quality ART products to a global customer base. All of our products are manufactured in FDA registered facilities in full compliance with all cGMP and ISO 9002 standards.

InVitroCare® is committed to provide customers with products and services meeting all specifications and fulfilling customers' needs and expectations. The highest priority and emphasis is placed on the integrity of our products, their safe manufacture and distribution and the compliance with all relevant regulations.

To achieve these goals, InVitroCare® media is manufactured in facilities which operate local quality management systems that comply with internal policies as well as with national and international standards (e.g. ISO) and regulations (e.g. GMP, PIC, HACCP). The fundamental elements of these systems are continuously undergoing improvement. They include:

- Comprehensive validations processes
- Immediately available technical support for customers
- Complete documentation and traceability for all manufactured lots
- Responsive Customer Service

MANUFACTURING

Liquid Media. Membrane filtration procedures used for the sterile filtration of InVitroCare® media are routinely validated. Filtration membranes are chosen from approved vendors and are sized to exclude particles greater that 0.2 microns. Membrane material must pass a microbial challenge test of being able to absolutely retain at least 10⁷ organisms of *Brevundimonus diminuta* per square cm of filter area. Each sterilizing filter unit is integrity tested by the manufacturer and provided with a Certificate of Quality. Integrity testing of each filter, when positioned in its appropriate housing, is performed both before product filtration and after filtration. An automated forward flow integrity tester, Palltronic, is used to perform filter integrity testing. Redundant 0.2 Micron filters are used in series to assure that the microbial challenge hitting the final sterilizing filter does not exceed the validated retention capabilities of the filter.

Chemicals. All chemicals used in InVitroCare® media products conform to at least ACS, USP, NF and other International Pharmacopeia standards where appropriate. Certificates are obtained from vendors. Samples of components are tested for endotoxin, efficacy and toxicity as appropriate.

Human Source Raw Materials. HSA used in InVitroCare® products is therapeutic grade. Parent HSA is derived from blood from CBER licensed Blood Banks. All donors used to obtain the Human Serum Albumin were individually tested and found to be non-reactive for HbsAg, HCV and antibodies to HIV-1 and HIV-2 by approved testing methods. Source material is also screened by questionnaire at the donor level for risk factors associated with Creutzfeldt-Jakob Disease (CJD).

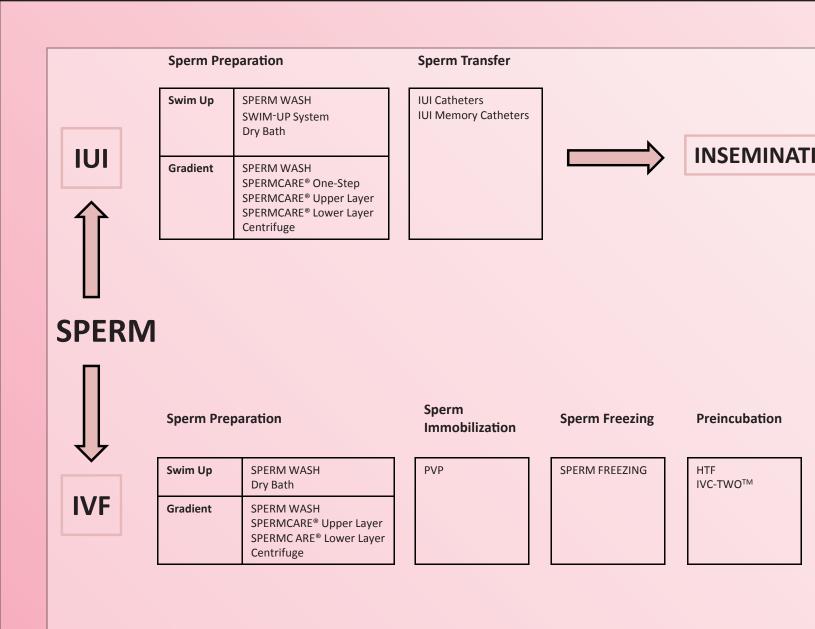
Water. All InVitroCare® media products are formulated using water which is aseptically processed from a validated system that meets current USP specifications. The method for the production includes: ultra filtration, reverse osmosis, deionization, and sterile filtration. The system is validated and monitored daily for chemical quality, bioburden and endotoxin. It is also routinely shutdown for cleaning and preventative maintenance annually.

QUALITY CONTROL

Sterility Testing of all media is performed in accordance with the Code of Federal Regulations (CFR) Title 21, Part 610.12 or current USP <71> which encompasses a 14 day sterility testing cycle.

Mouse Embryo Testing, utilizing fresh, one cell mouse embryos, is performed on each lot of media. Test results require that ≥80% of mouse embryos must develop to fully expanded blastocysts within 96 hours in culture







OOCYTES

HTF HEPES

HTF HEPES

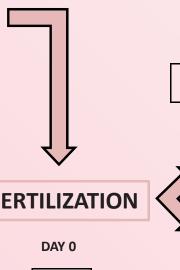
HTF IVC-TWO™ HYALURONIDASE

InVitroCare® Media Usage Guide

ON

Also Available:

HUMAN SERUM ALBUMIN MINERAL OIL **DPBS**



Pronuclear Stage DAY 1

 $IVC-TWO^{TM}$

Embryo Culture DAY 2

 $IVC-TWO^{TM}$

Embryo Culture & Transfer DAY 3

 $IVC-TWO^{TM}$

DAY 3 TRANSFERS



DAY 5 (BLASTOCYST) TRANSFERS

HTF

Pronuclear Stage DAY 1

 $IVC-TWO^{TM}$

Embryo Culture DAY 2

 $IVC-TWO^{TM}$

Embryo Culture DAY 3

IVC-TWOTM

Embryo Culture DAY 4

 $IVC-TWO^{TM}$ IVC-THREE™ **Extended Embryo Culture & Transfer** DAY 5

IVC-THREE[™]

The InVitroCare® IVF Media Series allows the embryologist and Reproductive Endocrinologist maximum flexibility in managing embryo development and transfer from fertilization through expanded blastocyst.

HTF HEPES
Cat # 2002 100ml
Cat # 2002-5 500ml

For egg retrieval, follicle flushing, ICSI procedures and cryopreservation



COMPONENT LIST

Sodium Chloride

Potassium Chloride

Magnesium Sulfate, Heptahydrate

Potassium Phosphate, Monobasic, Anhydrous

Calcium Chloride, Dihydrate

Sodium Bicarbonate

Glucose, D- (+)

Sodium Pyruvate

Sodium Lactate

Alanyl Glutamine

EDTA, Tetra-Sodium Salt

Gentamicin

Phenol Red

HEPES, Sodium Salt

- Uses a combined Sodium Bicarbonate/HEPES buffering system which is appropriate for those procedures that do not use a carbon dioxide atmosphere
- Formulated with EDTA and a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- For use without CO₂ (pre-equilibrate at 37°C)
- Requires protein supplementation
- Provided in both 100ml and 500ml plastic bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 18 month shelf life HTF Cat # 2001 100ml

For use as a fertilization medium and for early embryo culture through 2PN stage

COMPONENT LIST

Sodium Chloride

Potassium Chloride

Magnesium Sulfate, Heptahydrate

Potassium Phosphate, Monobasic, Anhydrous

Calcium Chloride, Dihydrate

Sodium Bicarbonate

Glucose, D- (+)

Sodium Pyruvate

Sodium Lactate

Alanyl Glutamine

EDTA, Tetra-Sodium Salt

Gentamicin

Phenol Red



- Uses a Sodium Bicarbonate buffering system which is appropriate for those procedures requiring the use of a carbon dioxide atmosphere during incubation
- Formulated with EDTA and a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- Requires protein supplementation
- For use after pre-equilibrate at 37°C in 5-6% CO,
- Provided in 100ml plastic bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 120 day shelf life InVitroCare believes that the InVitroCare® IVF Media Series, composed of HTF HEPES, HTF, IVC-TWO™ and IVC-THREE™, provides an optimum and appropriate metabolic environment for the formation and development of preimplantation embryos at each stage of their development.

IVC-TWOTM
Cat # 2008-V 20ml



For use as a cleavage medium, Day 3 embryo transfers and ICSI procedures

- Low Glucose and Phosphate Free
- Uses a Sodium Bicarbonate buffering system which is appropriate for those procedures requiring the use of a carbon dioxide atmosphere during incubation
- Formulated with EDTA and a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- Requires protein supplementation
- For use after pre-equilibrate at 37°C in 5-6% CO₂
- Provided in 20ml glass bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 120 day shelf life

IVC-THREETM Cat # 2007-V 20ml

For extended embryo culture and transfer through expanded Blastocyst (Day 5)

- Supplemented with Amino Acids and Vitamins
- Uses a Sodium Bicarbonate buffering system which is appropriate for those procedures requiring the use of a carbon dioxide atmosphere during incubation
- Does not contain EDTA
- Formulated with a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- Requires protein supplementation
- For use after pre-equilibrate at 37°C in 5-6% CO,
- Provided in 20ml glass bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 120 day shelf life



COMPONENT LIST			
	IVC-TWO™	IVC-THREE™	
Sodium Chloride	+	+	
Potassium Chloride	+	+	
Magnesium Sulfate, Heptahydrate	+	+	
Potassium Phosphate, Monobasic, Anhydrous	-	+	
Calcium Chloride, Dihydrate	+	+	
Sodium Bicarbonate	+	+	
Glucose, D- (+)	+	+	
Sodium Pyruvate	+	+	
Sodium Lactate	+	+	
Alanyl Glutamine	+	+	
EDTA, Tetra-Sodium Salt	+	-	
Sodium Citrate	+	+	
Glutathione	+	+	
Gentamicin	+	+	
Phenol Red	+	+	
Essential Amino Acids	-	+	
Non-Essential Amino Acids	+	+	
MEM Vitamin Mix	-	+	



PVP Cat # 2210 1ml

For use in ICSI procedures involving immobilization of sperm

- 10% Polyvinylpyrrolidone in HEPES buffered HTF
- Ready-to-use solution
- Provides more control of fluid in the ICSI pipette and prevents sperm from sticking to the injection pipette
- Uses a combined Sodium Bicarbonate/HEPES buffering system which is appropriate for those procedures that do not use a carbon dioxide atmosphere
- Contains the antibiotic Gentamicin
- Contains 5 mg/ml HSA
- For use after pre-equilibration at 37°C
- Provided in 1ml glass vials
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 12 month shelf life

COMPONENT LIST			
	PVP	HYALURONIDASE	
Polyvinylpyrrolidone (PVP)	+	-	
Hyaluronidase	-	+	
Sodium Chloride	+	+	
Potassium Chloride	+	+	
Magnesium Sulfate, Heptahydrate	+	+	
Potassium Phosphate, Monobasic, Anhydrous	+	+	
Calcium Chloride, Dihydrate	+	+	
Sodium Bicarbonate	+	+	
Dextrose, Anhydrous	+	+	
Sodium Pyruvate	+	+	
Sodium Lactate	+	+	
Alanyl Glutamine	+	+	
EDTA, Tetra-Sodium Salt	+	+	
Gentamicin	+	+	
HEPES, Sodium Salt	+	+	
Human Serum Albumin	+	+	
Phenol Red	+	+	

HYALURONIDASE Cat # 2212 1ml

For denuding oocytes of cumulus cells prior to ICSI procedures

- 100 EU/ml Hyaluronidase in HEPES buffered HTF
- Ready-to-use solution
- Used to help the dispersal of the cumulus mass and corona during denudation with a fine bore glass pipette
- Uses a combined Sodium Bicarbonate/HEPES buffering system which is appropriate for those procedures that do not use a carbon dioxide atmosphere
- Contains the antibiotic Gentamicin
- Contains 5 mg/ml HSA
- For use after pre-equilibration at 37°C
- Provided in 1ml glass vials
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 6 month shelf life

HUMAN SERUM ALBUMIN 100mg/ml Cat # 2101 12 x 5ml

Protein supplement for culture media applications requiring additional supplementation

- 100 mg/ml total protein (weight/volume) in normal saline
- Formulated with therapeutic grade Human Serum Albumin
- Parent HSA used to formulate this product is derived from blood from CBER licensed Blood Banks
- All donors used to obtain the Human Albumin were individually tested and found to be non-reactive for HbsAg, HCV and antibodies to HIV-1 and HIV-2 by approved testing methods. Source matrerial is also screened by questionnaire at the donor level for risk factors associated with Creutzfeldt-Jakob Disease (CJD).
- For use after pre-equilibration at 37°C
- Provided in 12x5ml glass vials/box
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 18 month shelf life



SPERMCARE®
UPPER LAYER (45%)
Cat # 2221-100 100ml
Cat # 2221-50 50ml
LOWER LAYER (90%)
Cat # 2222-100 100ml
Cat # 2222-50 50ml

Ready-to-use density gradient system designed to separate the motile fraction of human sperm from seminal fluid

COMPONENT LIST

Sodium Chloride

Potassium Chloride

Magnesium Sulfate, Heptahydrate

Potassium Phosphate, Monobasic, Anhydrous

Calcium Chloride, Dihydrate

Sodium Bicarbonate

Dextrose, Anhydrous

Sodium Pyruvate

Sodium Lactate

Alanyl Glutamine

Gentamicin

Phenol Red

HEPES, Sodium Salt

Silane Coated Colloidal Silica

Human Serum Albumin



- Silane-coated colloidal silica particles suspended in HEPES-buffered HTF
- Uses a combined Sodium Bicarbonate/HEPES buffering system which is appropriate for those procedures that do not use a carbon dioxide atmosphere
- Formulated with a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- For use without CO2 (pre-equilibrate at 37°C)
- Contains 5 mg/ml HSA
- Provided in both 50ml and 100ml glass bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 2 year shelf life

InVitroCare® SPERM PREPARATION

SPERMWASH Cat # 2003 12x12ml Cat # 2005 100ml Cat # 2005-5 500ml



For *in vitro* sperm washing and isolation procedures which do not require CO, incubation

- Uses a combined Sodium Bicarbonate/HEPES buffering system which is appropriate for those procedures that do not use a carbon dioxide atmosphere
- Formulated with EDTA and a stabilized form of glutamine
- Contains the antibiotic Gentamicin
- For use without CO₂ (pre-equilibrate at 37°C)
- Contains 5 mg/ml HSA
- Provided in 12x12ml glass vials/box, and both 100ml and 500ml plastic bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 18 month shelf life

COMPONENT LIST

Sodium Chloride

Potassium Chloride

Magnesium Sulfate, Heptahydrate

Potassium Phosphate, Monobasic, Anhydrous

Calcium Chloride, Dihydrate

Sodium Bicarbonate

Glucose, D- (+)

Sodium Pyruvate

Sodium Lactate

Alanyl Glutamine

EDTA, Tetra-Sodium Salt

Gentamicin

Phenol Red

HEPES, Sodium Salt

Human Serum Albumin

For procedures involving the cryopreservation and storage of human sperm used for IUI, IVF and other assisted reproductive procedures

- A HEPES buffered freezing medium for use with human sperm
- Contains 27% glycerol
- Contains 0.4 % HSA
- Provided in 125ml plastic bottle
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 18 month shelf life

SPERM FREEZING MEDIUM Cat # 2230 125ml



InVitroCare® IUI MADE SIMPLE ... Laboratory Results in an Office Setting

InVitroCare has a sperm preparation system to match your IUI protocols. Whether you use a Gradient, or a Swim-Up system, we can provide you with a premeasured, ready-to-use system designed for ease of use and to help prevent contamination.

SINGLE STEP GRADIENT SYSTEM

InVitroCare®
SpermCare®/Sperm Wash
(aka SpermCare® One-Step)
Cat # 2224



- Each SpermCare® /Sperm Wash (aka. SpermCare® One-Step) System contains enough product for 5 determinations.
- SpermCare® /Sperm Wash (aka. SpermCare® One-Step) is designed to reduce the chance of contamination and helps eliminate product waste.
- Includes EVERYTHING needed for sperm preparation EXCEPT a Centrifuge. (see Cat # 3130 IVC Centrifuge).
- Gradient, consisting of silane-coated colloidal silica particles suspended in HEPES-buffered HTF, removes bacteria, epithelial cells, cell debris, immature sperm and lymphocytes
- All system components contain glucose as a usable energy substrate to maintain normal cell metabolism and sperm function.
- Aseptically packaged and terminally sterilized.
- Store at 2-8°C



SCL402 Clinical Digital Centrifuge Cat # 3140

- Used with the InVitroCare[®] SpermCare[®] / Sperm Wash (Cat # 2224).
- Speed Range 300 to 4500 rpm, up to 2490 x g centrifugation force.
- Rotor capacity 8 x 15ml centrifuge tubes or 12 x 10ml vacutainer tubes.
- Timer 1 sec. to 99 min. or hold for continuous operation.
- Cold Room safe down to 2C.
- Includes rotor and 18 rotor sleeves and 18 plugs for smaller tubes.
- 1 year warranty brushed DC motor

SWIM-UP SYSTEM

InVitroCare®
SWIM-UP
Cat # 2620



- Each SWIM UP System contains enough product for 10 determinations (product AND syringes/needles).*
- SWIM UP System is designed to reduce the chance of contamination and helps eliminate product waste.
- All system components contain glucose as a usable energy substrate to maintain normal cell metabolism and sperm function
- Aseptically packaged and terminally sterilized

Store at 2-8°C

* Requires a Dry Bath System capable of maintaining a temperature of 37 Degrees Centigrade for 60 minutes (see Cat # 3200 IVC Dry Bath)



Mini Digital Dry Bath Cat # 3300

- Used with the InVitroCare® SWIM-UP System (Cat # 2620)
- Modular fully adjustable Digital Dry Bath
- Has auto temperature hold and can be used for other applications in the laboratory

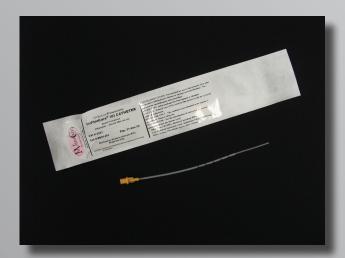
Always use washed spermatozoa when performing intrauterine artificial insemination, or intracervical artificial insemination.

The introduction of unwashed spermatozoa into the uterus will almost always result in severe adverse reactions, which may include anaphylactic shock.

IUI Catheter Cat # 2521 (10 Pack)

The InVitroCare® IUI Catheter is a 17 cm long IUI catheter made out of clear polyethylene with 1 cm markings. It has double side eyes and a rounded tip to insure a very smooth entry through the cervix.

Sold in Packs of 10.



MEMORY IUI Catheter Cat # 2522 (10 Pack)



The InVitroCare® MEMORY IUI Catheter is a 17 cm long IUI catheter made out of clear polyethylene with 1 cm markings and a built-in stylet. It has double side eyes and a rounded tip to insure a very smooth entry through the cervix.

Sold in Packs of 10.

Contraindications for use of the InVitroCare® IUI catheter:

- Not intended for IVF, GIFT or other intra fallopian tube procedures
- Should not be used in the presence of cervical infection
- Should not be used in the presence of or after recent pelvic inflammatory disease





MINERAL OIL Cat # 2011 100ml Cat # 2011-5 500ml

For use as an overlay when culturing in reduced volumes of media to prevent evaporation and to insulate the media from changes to osmolarity and pH

- Pharmaceutical grade sterile, light mineral oil
- Double pre-washed, ready-to-use
- For use after pre-equilibration at 37°C
- Provided in both 100ml and 500ml glass bottles
- One-Cell Mouse Embryo tested (>80% 1-cell to expanded blastocyst within 96 hrs)

Store at 2-8°C 18 month shelf life



DPBS Cat # 2009-5 500ml

DPBS

- Without calcium and magnesium (Cat # 2009-5)
- With calcium and magnesium (Cat # 2009-5CM)
- Provided in 500ml plastic bottles

2 year shelf life



IVF MEDIA PRODUCTS ... for the Next Generation

IUI MADE SIMPLE ... Laboratory Results in an Office Setting