Culture media

Illustration by Lisa Clark

Culture media

Our sequential culture media system contains formulations for each stage of oocyte fertilization, embryo development, and embryo transfer. Cook Medical was one of the first companies to provide a three-step sequential culture media system, which we launched in 1998. Since then we have continued to collaborate with physicians, scientists, and embryologists. This collaboration ensures that we replicate the fallopian tube environment as closely as possible when we design our culture media solutions. We work with assisted reproductive technology experts to understand each step of the delicate process. This collaboration with experts is crucial to ensuring that we continue to develop and deliver products that meet physicians' needs.

Culture media

Our goal is to help physicians to allow oocytes and embryos to develop in vitro like they would in vivo. We create precise formulations for each stage of oocyte fertilization and embryo development, up to and including the implantation stage. Cook Medical's culture media suite includes solutions that are optimized for oocyte pick-up, sperm preparation, fertilization, cleavage, cryopreservation, biopsy, blastocyst development, and embryo transfer. Our culture media system is a family of products formulated to contribute the appropriate nutrients to match the gamete's and embryo's shifting metabolic requirements.

Culture media

Sydney IVF Gamete Buffer

Used to physically wash gametes in preparation for the fertilization step in the IVF process.

- An adaptable buffer solution for all gamete procedures.
- Designed to be used specifically in atmospheric air conditions, not an enriched CO_2 environment.
- A specifically designed HEPES-buffered solution for the preparation of oocytes and sperm.
- Designed for swim-up, density gradient separation and diluent procedures.
- Maintains a stable environment during washing of cumulus-enclosed oocytes.
- Can be used during ICSI for lengthy, difficult procedures.

Order Number	Reference Part Number	Vial Volume mL
G48258	**K-SIGB-20**	20
G48259	**K-SIGB-50**	50
G48260	**K-SIGB-100**	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Gamete Buffer is used to wash the oocyte-cumulus complex after ovum aspiration and prior to it being transferred into Sydney IVF Fertilization Medium. Sydney IVF Gamete Buffer contains nonessential amino acids to prevent depletion of the oocyte's internal pool of amino acids. Sydney IVF Gamete Buffer is designed for washing of gametes, swim-up procedures, and as a diluent for density gradient and sperm thawing procedures. ICSI can also be performed in Sydney IVF Gamete Buffer when a HEPES-buffered environment is required.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Sperm Medium

Used to separate motile populations of sperm using the swim-up technique.

- Used for sperm preparation and storage.
- Optimal medium for swim-up and sperm washing in 6% CO_2.

Order Number	Reference Part Number	Vial Volume mL
G20714	**K-SISM-20**	20
G20715	**K-SISM-50**	50
G19017	**K-SISM-100**	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Sperm Medium was designed to separate motile populations of sperm using the swim-up technique. Intrauterine insemination can be performed in this medium, or sperm can be resuspended in Sydney IVF Fertilization Medium prior to the insemination of oocytes in vitro. The product should be equilibrated in 6% CO_2 prior to use.

Constituents

Calcium lactate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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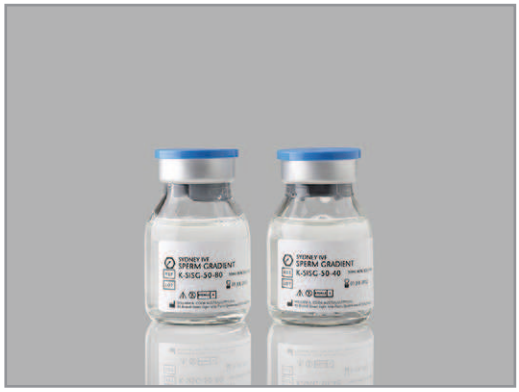

Sydney IVF Sperm Gradient

Used for sperm preparation using density-gradient separation.

- Convenient two-part kit to separate motile sperm.
- Silane-coated silica in Sydney IVF Gamete Buffer.
- Packaged in a kit with two vials: one of the 40% density and one of the 80% density.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G26675	**K-SISG-20**	20	2
G19015	**K-SISG-50**	50	2

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Sperm Gradient was designed for sperm preparation using density-gradient separation. The gradients are prepared by overlaying 1.5 mL of 40% solution on 1.5 mL of 80% solution in a conical-botton test tube. The liquefied semen is then overlaid on the gradient. The test tube is centrifuged, and the resultant pellet is aspirated and washed in Sydney IVF Gamete Buffer. The final pellet is resuspended in either Sydney IVF Sperm Medium or Sydney IVF Fertilization Medium.

Constituents

Calcium lactate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Silane-coated silica particles
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.3-7.5
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Sydney IVF Spermient™

Used for sperm preparation using density-gradient separation.

- 100% concentration enables customization of sperm density separation.
- The silane-coated, silica-based stock solution can be diluted with Sydney IVF Gamete Buffer to any required concentration.

Order Number	Reference Part Number	Vial Volume mL
G32772	K-SISP-20	20
G30445	K-SISP-100	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Spermient is a 100% stock solution that should be diluted with Sydney IVF Gamete Buffer to the density required for use (for example, 80% and 40%). A one- or two-layer gradient is then prepared in a conical-bottom test tube. The liquefied semen is overlaid on the gradient. The tube is centrifuged, and the resultant pellet is aspirated and washed in Sydney IVF Gamete Buffer. The final pellet is resuspended in either Sydney IVF Sperm Medium or Sydney IVF Fertilization Medium.

Constituents

Calcium lactate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Silane-coated silica particles
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.3-7.5
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

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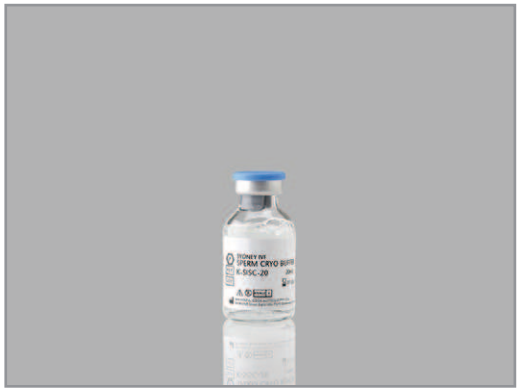

Sydney IVF Sperm Cryopreservation Buffer

Used for cryopreservation of human spermatozoa.

- Delivers a simple and effective way of preserving male fertility.
- HEPES buffered.
- Contains glycerol as a cryoprotectant.
- Suitable for MESA and TESA samples.

Order Number	Reference Part Number	Vial Volume mL
G32753	K-SISC-20	20

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Sperm Cryopreservation Buffer is used for freezing washed spermatozoa. It is a HEPES-buffered solution that contains glycerol as a cryoprotectant.

Constituents

Calcium lactate
D-glucose
HEPES
Glycine
Gentamicin
Glycerol
Human serum albumin*
Magnesium sulphate
Potassium chloride
Purified water
Sodium bicarbonate
Sodium chloride
Sodium phosphate
Sucrose

Release Specifications

pH (in air):	7.3-7.5
Osmolality:	1,190-1,210 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

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We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Sydney IVF Follicle Flush Buffer

Used for follicle flushing during ovum collection.

- HEPES-buffered solution that is designed specifically for flushing ovarian follicles during oocyte collection.
- Suitable for flushing needles and lines.
- Contains nonessential amino acids.
- Protein-free.

Order Number	Reference Part Number	Vial Volume mL
G20928	K-SIFB-100	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

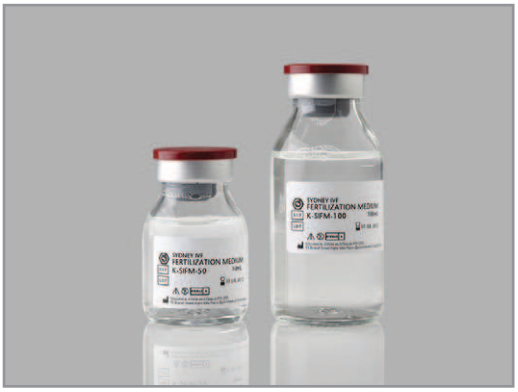
Sydney IVF Follicle Flush Buffer contains nonessential amino acids that help maintain homeostasis within the oocyte-cumulus complex during the collection procedure. This solution is HEPES-buffered so that it maintains pH at 37°C without the use of a CO_2 incubator.

Constituents

Calcium lactate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
HEPES
L-alanine
L-aspartic acid
L-asparagine
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.3-7.5
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})



Sydney IVF Fertilization Medium

Used to provide a suitable environment for both sperm and oocytes during the fertilization process.

- Bicarbonate-buffered medium for both short and long insemination protocols.
- Provides a glucose-rich environment for efficient oocyte-cumulus complex and sperm cell metabolism.
- Helps provide a suitable environment for gamete fusion that includes antioxidants and nonessential amino acids.

Order Number	Reference Part Number	Vial Volume mL
G20718	K-SIFM-20	20
G19019	K-SIFM-100	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

After the oocyte-cumulus complex has been washed, it is placed in Sydney IVF Fertilization Medium, where insemination occurs. This medium contains glucose to help sperm function and provides metabolites for the cumulus and coronal cells. The oocyte can remain in this medium for 16-18 hours. The fertilized oocytes are checked for pronuclei and then transferred into Sydney IVF Cleavage Medium. This is the first step in the Cook sequential system.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Taurine

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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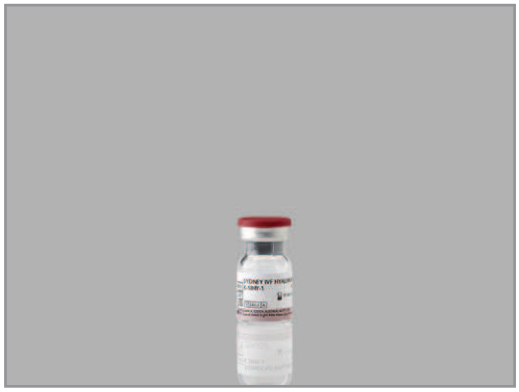

Sydney IVF Hyaluronidase

Used for human oocyte cumulus cell removal.

- A pharmaceutical-grade enzyme that helps remove the cumulus cells prior to ICSI.
- A bicarbonate-buffered medium that contains 80 IU/mL of hyaluronidase.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G26773	**K-SIHY-1-5**	1	5

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF Hyaluronidase is used for human oocyte cumulus cell removal. The oocyte-cumulus complexes should be placed in the Sydney IVF Hyaluronidase for no longer than one minute. Flexipet® pipettes can then be used to gently denude the cumulus and coronal cells from the oocyte. The product should be equilibrated in 6% CO_2 prior to use.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
Hyaluronidase
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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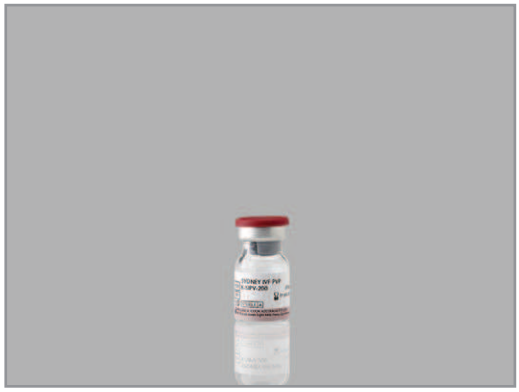

Sydney IVF PVP

Used to reduce human sperm motility prior to ICSI.

- Bicarbonate buffered.
- Contains 10% polyvinylpyrrolidone.

Order Number	Reference Part Number	Vial Volume µL	Vial Quantity
G26774	**K-SIPV-200-5**	200	5

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Sydney IVF PVP is used to reduce the motility of sperm in order to make it easier to isolate and capture the sperm with an ICSI pipette. The product should be equilibrated in 6% CO_2 prior to use.

Constituents

Calcium lactate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-taurine
Magnesium sulphate
Potassium chloride
Potassium phosphate
PVP (MW 360,000)
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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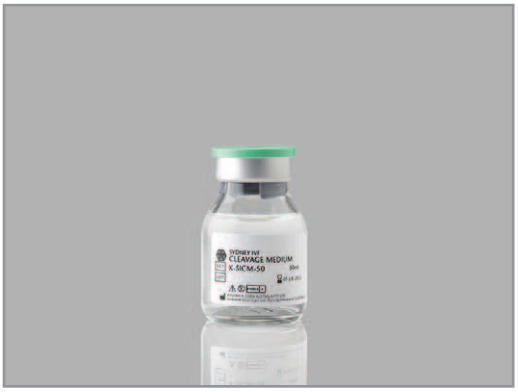

Sydney IVF Cleavage Medium

Used for human embryo culture from Day 1 to Day 3.

- A bicarbonate-buffered medium specifically designed for early cleavage stage development.
- Low in glucose and high in pyruvate to help optimize early cleavage stage development.
- Recommended for ICSI procedures to reduce oocyte stress when cumulus cell metabolism and sperm cell movement are no longer critical.

Order Number	Reference Part Number	Vial Volume mL
G20720	**K-SICM-20**	20
G20721	**K-SICM-50**	50
G19018	**K-SICM-100**	100

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

After normally fertilized oocytes are identified, they are transferred into Sydney IVF Cleavage Medium for culture from Day 1 to Day 3 (up to eight-cell stage). Sydney IVF Cleavage Medium has been formulated to provide early embryos with the necessary metabolic substrates for development. This is the second step in the Cook sequential system. ICSI can be performed in this medium, as glucose is required only to support sperm function and cumulus cell metabolism.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-alanine
L-arginine
L-asparagine
L-aspartic acid
L-cystine
L-glutamic acid
L-histidine
L-isoleucine
L-leucine
L-lysine
L-methionine
L-phenylalanine
L-proline
L-serine
L-taurine
L-threonine
L-tryptophan
L-tyrosine
L-valine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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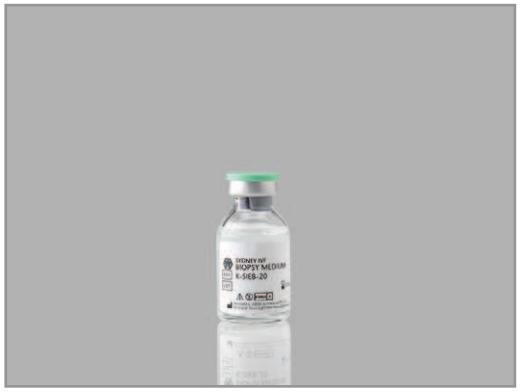

Sydney IVF Embryo Biopsy Medium

Bicarbonate based, calcium- and magnesium-free medium used to facilitate the aspiration of blastomeres for preimplantation genetic diagnosis.

Order Number	Reference Part Number	Vial Volume mL
G26120	K-SIEB-20	20

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Embryos are placed in this medium for approximately five minutes to break down gap junctions between blastomeres. One or two blastomeres are removed for genetic analysis, and the embryo is then returned to the Sydney IVF Cleavage Medium or Sydney IVF Blastocyst Medium for further culturing. The product should be equilibrated in 6% CO_2 prior to use.

Constituents

EDTA
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Sydney IVF Cryopreservation Kit

Used to protect human cleavage-stage embryos during dehydration and freezing.

- HEPES-buffered, three-step kit.
- Contains propanediol and sucrose as cryoprotectants.
- Suitable for all stages, from zygotes to compacted morulae.

Order Number	Reference Part Number	Vial Volume mL	Vial Volume mL
G19016	**K-SICS-5000**	20 (x1)	10 (x2)

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Cryopreservation Kit is used to protect human cleavage-stage embryos from 2PN to 8-cell stage during dehydration and freezing. This HEPES-buffered kit contains propanediol and sucrose as cryoprotectants and utilizes a three-step equilibration protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Propanediol
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Sucrose

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There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Thawing Kit

Used to protect human cleavage-stage embryos during thawing and rehydration stages.

- HEPES buffered.
- Used in a four-step protocol.
- Formulated to match the cryopreservation kit and reduce embryo stress.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G19014	**K-SITS-5000**	10	4

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Thawing Kit is used to thaw early-stage embryos, from 2PN to morula, that have been previously cryopreserved using a slow-freeze technique. This kit utilizes a four-step dilution protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Propanediol
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Sucrose

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Blastocyst Medium

Used for culture of human embryos from Day 3 to Day 5 or 6.

- Designed to provide the necessary nutrients to support blastulation, differentiation, and expansion.
- Bicarbonate buffered.
- Higher glucose concentration to maximize blastocyst metabolism and energy production.
- Includes essential and nonessential amino acids to support blastocyst development.
- Ideal for use in a low-oxygen environment.

Order Number	Reference Part Number	Vial Volume mL
G20722	K-SIBM-20	20
G20929	K-SIBM-50	50

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

Once an embryo has reached Day 3 (the eight-cell) stage, it is transferred into Sydney IVF Blastocyst Medium. This medium has been metabolically balanced to support blastocyst development. This is the third and final step of the Cook sequential system.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
Gentamicin
Glutamine-stabilized
Glycine
Human serum albumin*
L-alanine
L-arginine
L-asparagine
L-aspartic acid
L-cystine
L-glutamic acid
L-histidine
L-isoleucine
L-leucine
L-lysine
L-methionine
L-phenylalanine
L-proline
L-serine
L-taurine
L-threonine
L-tryptophan
L-tyrosine
L-valine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate

Release Specifications

pH (in air):	7.5-7.8
Osmolality:	280-290 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

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We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Sydney IVF Blastocyst Cryopreservation Kit

Used to protect human blastocysts during dehydration and freezing.

- Facilitates long-term blastocyst storage.
- HEPES-buffered.
- Contains glycerol and sucrose as cryprotectants.
- Optimizes the three-step freezing process.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G26738	K-SIBF-5000	20	3

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Blastocyst Cryopreservation Kit is used to protect human blastocysts during dehydration and freezing. This HEPES-buffered kit contains glycerol and sucrose as cryoprotectants and utilizes a three-step equilibration protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycerol
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Sucrose

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Blastocyst Thawing Kit

Used to protect human blastocysts during thawing and rehydration stages.

- Utilizes a four-step thawing process.
- HEPES-buffered to protect cryopreserved blastocysts during thawing.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G26739	K-SIBT-5000	20	4

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Blastocyst Thawing Kit is used to protect human blastocysts during thawing and rehydration. This kit utilizes a four-step dilution protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Sucrose

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Blastocyst Vitrification Kit

Used for the vitrification of blastocysts on Day 5 or Day 6.

- Enables successful vitrification of blastocysts.
- HEPES buffered.
- Contains DMSO, ethylene glycol, and trehalose as cryoprotectants.
- Utilizes a three-step vitrification process.

Order Number	Reference Part Number	Vial Volume mL	Vial Volume mL
G49621	K-SIBV-5000	20 (x3)	10 (x1)

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Blastocyst Vitrification Kit is used for the vitrification of blastocysts on Day 5 or Day 6. This HEPES-buffered kit contains DMSO, ethylene glycol, and trehalose as cryoprotectants and utilizes a three-step equilibration protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
DMSO
EDTA
Ethylene glycol
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Trehalose

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})

Sydney IVF Blastocyst Warming Kit

Used for the warming of human blastocysts that have undergone vitrification.

- Enables successful warming of vitrified blastocysts.
- HEPES buffered.
- Contains trehalose.
- Utilizes a three-step warming process.

Order Number	Reference Part Number	Vial Volume mL	Vial Quantity
G49626	K-SIBW-5000	20	3

Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.

Usage

The Sydney IVF Blastocyst Warming Kit is used for the warming of human blastocysts that have undergone vitrification. This kit utilizes a three-step warming and dilution protocol.

Constituents

Calcium lactate
Calcium pantothenate
D-glucose
EDTA
Gentamicin
Glutamine-stabilized
Glycine
HEPES
Human serum albumin*
L-alanine
L-asparagine
L-aspartic acid
L-glutamic acid
L-proline
L-serine
L-taurine
Magnesium chloride
Magnesium sulphate
Potassium chloride
Potassium phosphate
Purified water
Sodium bicarbonate
Sodium chloride
Sodium pyruvate
Trehalose

**Standard measures are taken to prevent infections resulting from the use of medicinal products that are prepared human blood or plasma. Individual donations and plasma pools are screened for specific markers of infection, and during manufacturing of the medicinal blood or plasma product, steps are included to inactivate or remove viruses. Despite these safeguards, there is a possibility that medicinal blood or plasma products may transmit infective agents. Infective agents may include unknown or emerging agents and other pathogens.*

There are no reports of proven virus transmission with albumin manufactured to European Pharmacopeia specifications by established processes.

We strongly recommend that you record the patient name and product batch number every time that you administer Cook IVF media to a patient.

Release Specifications

pH (in air):	7.3-7.5
Osmolality (of base solution):	285-295 mOsm/kg
2-cell MEA:	≥ 80% of the control
Endotoxins:	< 0.4 EU/mL
Sterile:	Filtered (SAL 10^{-3})