



## Continuous Single Culture Complete (CSCM-C)

with Gentamicin and HSA

Catalog No. 90165

2 X 20 mL

60 mL

For assisted reproductive procedures.

Für assistierte Reproduktionsverfahren.

Per tecniche di riproduzione assistita.

Para utilización en técnicas de reproducción asistida.

Pour les techniques de procréation médicalement assistée.

Para técnicas de reprodução assistida.

Για διάδικτης υποβοθύμενης αναπαραγωγής.

Pro postupy asistované reprodukce.

Til assisteret reproduktion behandling.

Avustesins lisääntymismenetelmäin.

Ar pařížidzkejmi veicamām reproduktívām procedūrām.

Voor geassisteerde voortplantingsprocedures.

Do procedur wspomagane go rozrodu.

Pentru proceduri de reproducere asistată.

Für procedurer för asisterad befruktning.

Kasutamiseks abistatud viljastamisprotseduurides.

Assziszáláti reproducíciós eljárásokhoz.

Skirta pagalbinio apvaisinimo procedūroms.

Yardımcı üreme işlemi içinidir.

Na postupy asistovanej reprodukcie.

За процедури за асистирана репродукция.

Za postupke potporognute oplođenje.

Għal proċeduri ta' riproduzzjoni assistita.

Za postupke asistiranre reprodukcije.

**REFERENCES**

Biggs, JD, and Racowsky, C. The development of fertilized human ova to the blastocyst stage in KSOM<sup>®</sup> medium: is a two-step protocol necessary? *RBMO Online*, 5:133-140, 2002.

Pool, TB. Recent advances in the production of viable human embryos in vitro. *RBMO Online*, 4:294-302, 2002.

Biggs, JD. Thoughts on embryo culture conditions. *RBMO Online*, 4 (suppl.1):30-38, 2001.

Lane, M., Hooper, K., and Gardner, DK. Effect of essential amino acids on mouse embryo viability and ammonium production. *J. Asst. Reprod. Genet.* 18: 519-525, 2001.

Biggs, JD, and McGinnis, LK. Evidence that glucose is not always an inhibitor of mouse preimplantation development in vitro. *Hum. Reprod.* 16:153-163, 2001.

Devreker, F., Van den Bergh, M., Biramane, J., Winston, RML., Englert, Y., and Hardy, K. Effects of taurine on human embryo development in vitro. *Hum. Reprod.* 14: 2350-2356, 1999.

**ENGLISH****EU CAUTION:** For Professional Use Only**INDICATION FOR USE**

Continuous Single Culture Complete (CSCM-C) is intended for use in assisted reproductive procedures which include human gamete and embryo manipulation. These procedures include the use of CSCM-C as a culture medium from fertilization through day 5/6 of development in vitro.

**DEVICE DESCRIPTION**

Continuous Single Culture Complete is a novel solution optimized for use in an uninterrupted culture system without dish change or medium renewal.

CSCM-C contains Human Serum Albumin (HSA) for a final total protein concentration of 5 mg/mL and the antibiotic Gentamicin Sulfate (10 µg/mL).

**COMPOSITION:**

<u>Salts &amp; Ions</u>	<u>Amino Acids</u>
Sodium Chloride	Alanine
Potassium Chloride	Asparagine
Calcium Chloride	Aspartic Acid
Magnesium Sulfate	Glutamic Acid
Potassium Phosphate	Glycine
<u>Buffer</u>	Proline
Sodium Bicarbonate	Serine
<u>Energy Substrates</u>	Arginine
Sodium Pyruvate	Cysteine
Glucose	Histidine
Sodium Lactate	Isoleucine
<u>Antioxidant</u>	Leucine
EDTA	Lysine
Sodium Citrate	Methionine
<u>Dipeptide</u>	Phenylalanine
Alanyl-Glutamine	Threonine
<u>pH Indicator</u>	Tryptophan
Phenol Red	Tyrosine
<u>Antibiotic</u>	<u>Protein</u>
Gentamicin Sulfate	Human Serum Albumin
	Water
	WFI Quality

**QUALITY ASSURANCE**

CSCM-C is membrane filtered and aseptically processed according to manufacturing procedures which have been validated to meet a sterility assurance level (SAL) of 10<sup>-3</sup>.

Each lot of CSCM-C is tested for:

Endotoxin by Limulus Amebocyte Lysate (LAL) methodology ( $\leq 0.25$  EU/mL)  
Biocompatibility by Mouse Embryo Assay (one-cell at  $\geq 80\%$  expanded blast 96h).

Sterility by the current USP Sterility Test <71>  
Human Sperm Survival Assay (HSSA) ( $\geq 70\%$  motility at 24h).

All results are reported on a lot specific Certificate of Analysis which is available upon request.

**BUFFER SYSTEM**

CSCM-C uses sodium bicarbonate as a buffering system. This is specifically designed for use in a CO<sub>2</sub> incubator.

**DIRECTIONS FOR USE**

CSCM-C is a complete, ready-to-use medium containing Human Serum Albumin (HSA). It is not necessary to add any protein before use.

**EQUILIBRATION**

CSCM-C should be pre-warmed to 37°C and equilibrated to the desired pH overnight in a 5-6% CO<sub>2</sub> incubator prior to use. A sufficient volume of medium is required so that oocyte recovery, insemination and embryo culture dishes can be prepared.

The following are general procedures for the indications for use of CSCM-C.

**CAUTION:** To avoid problems with contamination, handle using aseptic techniques and discard any excess medium that shows any evidence of contamination after opening.

**EU:** Standard measures to prevent infections resulting from the use of medicinal products prepared from human blood or plasma include selection of donors, screening of individual donations and plasma pools for specific markers of infection and the inclusion of effective manufacturing steps for the inactivation/ removal of viruses. Despite this, when medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens. There are no reports of proven virus transmissions with albumin manufactured to European Pharmacopoeia specifications by established processes. It is strongly recommended that every time FUJIFILM Irvine Scientific, Inc. Reproductive Media Products culture media are administered to a patient, the name and batch number of the product are recorded in order to maintain a link between the patient and the batch of the product.

**US:** CSCM-C contains Human Serum Albumin (HSA). Human source material used in the manufacture of this product has been tested by FDA-licensed kits and found to be non-reactive to the antibodies to Hepatitis C (HCV), and antibodies to Human Immunodeficiency Virus (HIV). However, no test method offers complete assurance that products derived from human sources are noninfectious. Handle all human source material as if it were capable of transmitting infection, using universal pre-cautions. Donors of the source material have also been screened for CJD.

**CONTRAINDICATION**

CSCM-C contains the antibiotic Gentamicin Sulfate. Appropriate precautions should be taken to ensure that the patient is not sensitized to this antibiotic.

**Glossary of Symbols\*:**

Catalog Number



Lot Number



Sterilized using aseptic processing techniques (filtration)

Expiration:  
Year - Month - Day

Caution, consult accompanying documents



Consult instructions for use

Storage Temperature  
2-8°C

Manufacturer



Do not resterilize



Do not use if package is damaged



U.S. Caution: Federal law restricts this device to sale by or on the order of a licensed healthcare practitioner.

CE Mark  
0050Emergo Europe - Westervoortsedijk 60  
6827 AT Arnhem  
The Netherlands

\*Symbol Reference - EN ISO 15223-1, Medical devices – Symbols to be used with medical device labels, labeling.

**Fertilization:**

On the day before oocyte retrieval, prepare insemination dishes with CSCM-C overlayed with oil and pre-equilibrate overnight to 37°C in a CO<sub>2</sub> incubator. Immediately upon oocyte collection and identification, place oocytes into the pre-equilibrated medium and return to the incubator for the desired period (1-4 hours) prior to insemination by conventional IVF or ICSI.

**Conventional IVF:**

1. It is recommended to aseptically dispense 50,000 - 100,000/mL motile sperm per microliter containing 1-3 oocytes.
2. Return the insemination dish to the incubator and check for normal fertilization 16-20 hours post insemination.

**Intracytoplasmic Sperm Injection (ICSI):**

1. Following at least 1 hour post oocyte denuding (and no more than 4 hours following oocyte retrieval), remove denuded oocytes from incubator and inseminate with sperm per standard ICSI protocol for your individual laboratory.
2. Immediately following insemination, place 1-3 inseminated oocytes into a fresh drop of the pre-equilibrated insemination dish, return dish to the incubator and check for normal fertilization 16-20 hours post insemination.

**Embryo Culture:**

On the day of fertilization (one day prior to fertilization assessment), prepare embryo culture dishes with CSCM-C overlayed with oil and pre-equilibrate overnight to 37°C in a 5-6% CO<sub>2</sub> incubator.

Following fertilization assessments with the identification of the presence of normal fertilization (two pronuclei and two polar bodies), transfer 2PN zygotes into the pre-equilibrated CSCM-C culture dish previously prepared. It is recommended to allow the embryos to grow in a continuous, uninterrupted culture system, without changing medium, until the desired developmental stage is reached (up to day 5/6 of development).

For additional details on the use of these products, each laboratory should consult its own laboratory procedures and protocols which have been specifically developed and optimized for your individual medical program.

**STORAGE INSTRUCTIONS AND STABILITY**

Store the unopened bottles refrigerated at 2° to 8°C.

Do not freeze or expose to temperatures greater than 39°C.

Duration Following Bottle Opening:  
Product should be used within eight (8) weeks from opening.

As human source material is present in the product it may develop some protein precipitate during storage or in culture over time. This protein precipitate is not known to have an effect on product performance.

**PRECAUTIONS AND WARNINGS**

This device is intended to be used by staff trained in assisted reproductive procedures. These procedures include the intended application for which this device is intended.

The user facility of this device is responsible for maintaining traceability of the product and must comply with national regulations regarding traceability, where applicable.

Do not use any bottle of medium which shows evidence of particulate matter, cloudiness or is not pale orange in color.

Not for injection use.























## SLOVENŠČINA

**OPOZORILO ZA EU:** Samo za profesionalno uporabo

## INDIKACIJE ZA UPORABO

Medij Continuous Single Culture Complete (CSCM-C) je namenjen za uporabo v postopkih asistirane reprodukcije, ki vključujejo manipulacijo humanih gamet in embrijev. Ti postopki vključujejo uporabo medija CSCM-C kot gojišča za kulture od oploditve do 5./6. dneva razvoja *in vitro*.

## OPIS PRIPOMOČKA

Continuous Single Culture Complete je nova formulacija, optimizirana za uporabo v neprekinitnem sistemu za gojenje kultur brez zamenjave posode ali obnovitve medija.

CSCM-C vsebuje humani serumski albumin (HSA) za končno koncentracijo celotne vsebnosti beljakovin 5 mg/ml in antibiotik gentamicinjev sulfat (10 µg/ml).

## SESTAVA:

Soli inioni	Aminokisline
Natrijev klorid	Alanin
Kalijev klorid	Asparagin
Kalcijev klorid	Asparaginska kislina
Magnezijev sulfat	Glutaminska kislina
Kalijev fosfat	Glicin
Puffer	Prolin
Natrijev bikarbonat	Serin
Energijski substrati	Arginin
Natrijev piruvat	Cistin
Glukoza	Histidin
Natrijev laktat	Izolevcin
Antioksidant	Levcin
EDTA	Lizin
Natrijev citrat	Metionin
Dipeptid	Fenilalanin
Alanilglutamin	Treonin
Indikator vrednosti pH	Triptofan
Fenol rdeče	Tirozin
Anibiotik	Beljakovine
Gentamicinjev sulfat	Humani serumski albumin
	Voda
	Kakovost, ki ustreza vodi za injekcije

## ZAGOTAVLJANJE KAKOVOSTI

Medij CSCM-C je membransko filtriran in aseptično obdelan skladno z validiranimi proizvodnimi postopki za zagotavljanje stopnje sterilnosti (SAL) 10<sup>-3</sup>.

Vsaka serija medija CSCM-C je testirana glede:  
prisotnosti endotoksinov z metodologijo LAL (Limulus Amebocyte Lysate) (<0,25 EU/ml),  
biokompatibilnosti s testom z mišimi embriji (enoceličnimi; ≥ 80 % razprtva blastocita po 96 urah),  
sterilnosti s trenutnim testom USP za sterilnost >71%,  
preživejša humanih semenčic (HSSA; ≥ 70 % gibljivosti po 24 urah).

Vsi rezultati so navedeni na analiznem certifikatu za vsako serijo, ki je na voljo na zahtevo.

## PUFRSKI SISTEM

Medij CSCM-C uporablja natrijev bikarbonat kot pufrski sistem. Medij je namreč posebej zasnovan za uporabo v CO<sub>2</sub>-inkubatorju.

## NAVODILA ZA UPORABO

CSCM-C je celovit medij, ki je že pripravljen za uporabo in vsebuje humani serumski albumin (HSA). Pred uporabo mu ni treba dodati beljakovin.

## URAVNOTEŽENJE

Medij CSCM-C je treba pred uporabo segreti na 37 °C in uravnotežiti na želeno vrednost pH tako, da se čez noč postavi v inkubator s 5–6 % CO<sub>2</sub>. Količina medija mora zadostovati za obnovitev oocitov, osemenitev in pripravo posod za gojenje embrijev.

V nadaljevanju so opisani splošni postopki glede na indikacije za uporabo medija CSCM-C.

### Oploditev:

Na dan pred obnovitvijo oocitov pripravite posode za osemenitev: napolnite jih z medijem CSCM-C, prekrjite s plastično oljo in jih pred uporabo uravnotežite na 37 °C tako, da jih čez noč postavite v CO<sub>2</sub>-inkubator. Ocite takoj po odvzemtu in identifikaciji prenesite v predhodno uravnotežen medij ter vrnite v inkubator za želeno obdobje (1–4 ure), preden jih osemenite z običajno oploditvijo *in vitro* (IVF) ali intracitoplazemske injiciranjem semenčic (ICSI).

### Običajni postopek IVF:

1. Priporočljivo je, da aseptično porazdelite 50.000–100.000/ml gibljivih semenčic na mikrokapljico, ki vsebuje 1–3 oocite.
2. Posodo za osemenitev vrnite v inkubator in 16–20 ur po osemenitvi preverite, ali je prišlo do normalne oploditve.

### Intracitoplazemsko injiciranje semenčic (ICSI):

1. Najmanj 1 ur po denudaciji oocitov (in ne več kot 4 ure po obnovitvi oocitov) vzemite denudirane oocite iz inkubatorja in jih osemenite s spermom po standardnem protokolu ICSI, ki se uporablja v vašem laboratoriju.
2. Tako pa osemenitvi prenesite 1–3 osemenjene oocite v posodo za osemenitev s svezo kapljico predhodno uravnoteženega medija, posodo vrnite v inkubator in 16–20 ur po osemenitvi preverite, ali je prišlo do normalne oploditve.

### Gojenje embrijev:

Na dan oploditve (en dan pred oceno oploditve) pripravite posode za gojenje embrijev: napolnite jih z medijem CSCM-C, prekrjite s plastično oljo in jih pred uporabo uravnotežite na 37 °C tako, da jih postavite v inkubator s 5–6 % CO<sub>2</sub>.

Po opravljenih ocenah oploditve in ugotovitvi prisotnosti normalne oploditve (dva pronukleusa in dve polarni telesci) prenesti zigote 2PN v predhodno pripravljeno posodo za gojenje kultur z uravnoteženim medijem CSCM-C. Priporočljivo je, da embrije gojite v kontinuiranem, neprakenjem sistemu za gojenje kultur, ne da bi zamenjali medij, dokler ne dosežete želenega razvojnega stadija (tj. do 5./6. dneva razvoja).

Dodatev podrobnosti o uporabi teh izdelkov določajo notranji laboratorijski postopki in protokoli vsakega laboratorija, ki so bili posebej razviti in optimizirani za zadevni medicinski program.

## NAVODILA ZA SHRANJEVANJE IN STABILNOST

Neodprt steklencne shranujte v hladilniku pri temperaturi od 2 do 8 °C.

Ne zamrzujte in ne izpostavljajte temperaturam nad 39 °C.

Uporabnost po odprtju steklencice:  
Izdelek je treba uporabiti v osmih (8) tednih od odprtja.

Ker je v izdelku prisoten material človeškega izvora, se lahko med shranjevanjem ali v kulturi sčasoma pojavi nekoliko beljakovinske oborine. Ni znano, da bi ta beljakovinska oborina vplivala na uporabnost izdelka.

## PREDVIDNOSTNI UKREPI IN OPOZORILA

Ta pripomoček sme uporabljati samo osebje, ki je usposobljeno za postopke asistirane reprodukcije. Ti postopki vključujejo predvideno uporabo, za katero je ta pripomoček zasnovan.

Ustanova, v kateri dela uporabnik tega pripomočka, je odgovorna za vzdrževanje sledljivosti izdelka in mora upoštevati nacionalne predpise glede sledljivosti, kjer je to ustrezno.

Ne uporabite nobene steklencice z medijem, v kateri opazite delce ali motnost ali če raztopina ni bledo oranžne barve.

### Izdelek ni namenjen za injiciranje.

**OPOZORILO:** Za preprečitev kontaminacije morate z izdelkom ravnati z aseptičnimi tehnikami in zavreči morebitni odvečni medij, ki po odprtju kaže kakrsne koli znake kontaminacije.

**EU:** Standardni ukrepi za preprečevanje okužb, ki izhajajo iz uporabe medicinskih izdelkov, pripravljenih iz človeške krvi ali plazme, vključujejo selekcijo darovalcev, presejanje posameznih darovanih bioloških materialov in združene plazme za specifično označevalce okužbe in vključevanje učinkovitih proizvodnih korakov za inaktivacijo/odstranitev virusov. Kljub temu pri uporabi medicinskih izdelkov, pripravljenih iz človeške krvi ali plazme, ni mogoče popolnoma izključiti prenosa povzročiteljev kužnih bolezni. To velja tudi za virus, ki so še neznani ali so se začeli širiti pred kratkim, in druge patogene. O dokazanih prenosih virusov z albuminom, prizvedenim skladno s specifikacijami Evropske farmakopeje in uveljavljenimi postopki, ni nobenih poročil. Želo priporočljivo je, da se ob vsaki uporabi izdelkov za reproduktivne postopke proizvajalca FUJIFILM Irvine Scientific, Inc. pri bolniku zapišeta ime in serijska številka izdelka, da se ohrani povezava med bolnikom in serijo izdelka.

**ZDA:** CSCM-C vsebuje humani serumski albumin (HSA). Izhodni material človeškega izvora, ki se uporablja pri proizvodnji tega izdelka, je bil testiran z uporabo kompletot, potrjenih s strani FDA: testi so pokazali, da ni reaktivnih na protitelesa proti hepatitisu C (HCV) in na protitelesa proti virusu humane imunske pomanjkljivosti (HIV). Vendar nobena lesna metoda ne more popolnoma zagotoviti, da izdelki, pridobljeni iz človeških virov, niso kužni. Pri ravnanju z vsemi materiali človeškega izvora upoštevajte možno tveganje prenosa okužbe, tj. uporabljajte univerzalne previdnostne ukrepe. Pri darovalcih izvirnega materiala je bilo opravljeno tudi presejanje za CJB.

## KONTRAINDIKACIJE

Medij CSCM-C vsebuje antibiotik gentamicinjev sulfat. Izvesti je treba ustrezne previdnostne ukrepe za zagotavljanje, da bolnik ni občutljiv za ta antibiotik.