FUJIFILM
Value from Innovation

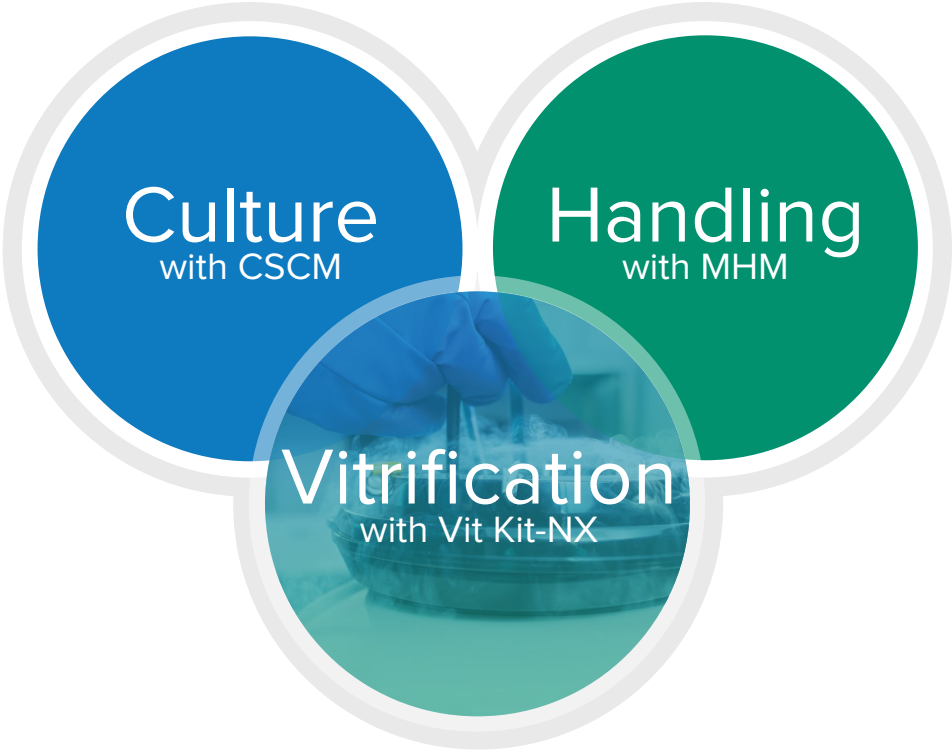
IrvineScientific

Vit Kit-NX

ADVANCED VITRIFICATION SOLUTIONS

Reduce Stress on Oocytes and Embryos with a Continuous System

Building on the benefits of Continuous Single Culture Medium (CSCM) and Multi-purpose Handling Medium (MHM), Vit Kit-NX brings the vitrification process in line with both the culture and handling steps of IVF by eliminating the need to transfer precious specimens to different media formulations for vitrification.



> Reduce stress on embryos and oocytes, simplify laboratory processes, and achieve high survival rates.

Founded on a Trusted Formula

The new Vit Kit-NX retains the key benefits of the original Vit Kit, including:

- DMSO and EG as permeating cryoprotectants
- Dextran serum supplement as a protein source
- Gentamicin as an antibiotic

How Modern Is Your Media?

Vit Kit-NX	VS	Traditional Vit Media
CSCM Base Designed for human embryo culture		M199 Base Designed for chick embryo fibroblasts
HEPES/MOPS Dual-buffered system		HEPES Mono-buffered system

There is simply nothing more important than protecting precious human oocytes and embryos at every stage of the IVF cycle.

To help ensure your patients achieve their goals for a healthy family, it is crucial that vitrification seamlessly integrate into the IVF cycle and safeguard embryos for the future.

While effective, many vitrification kits feature an M199 base, which is a formulation originally designed for chick embryo fibroblasts—not human embryos—as well as a mono-buffered system. Though sufficient, these solutions could benefit from enhancement to ensure formulas are targeted to support human embryos, as well as create a steady, continuous system that achieves high survival rates.

Vit Kit - Freeze NX and Vit Kit - Warm NX are the latest advancements in vitrification media aimed to streamline and simplify your processes. Each multi-step kit features a collection of formulations derived from current IVF media tailored specifically for the vitrification process. By building on the benefits of contemporary IVF media for use in vitrification, Vit Kit-NX brings the vitrification process in line with both the culture and handling steps of IVF.

The enhanced formulas deliver consistent results, including high oocyte and embryo survival rates, while also offering an effective, flexible, and economical media ideally suited for the nuanced needs of the modern IVF laboratory.

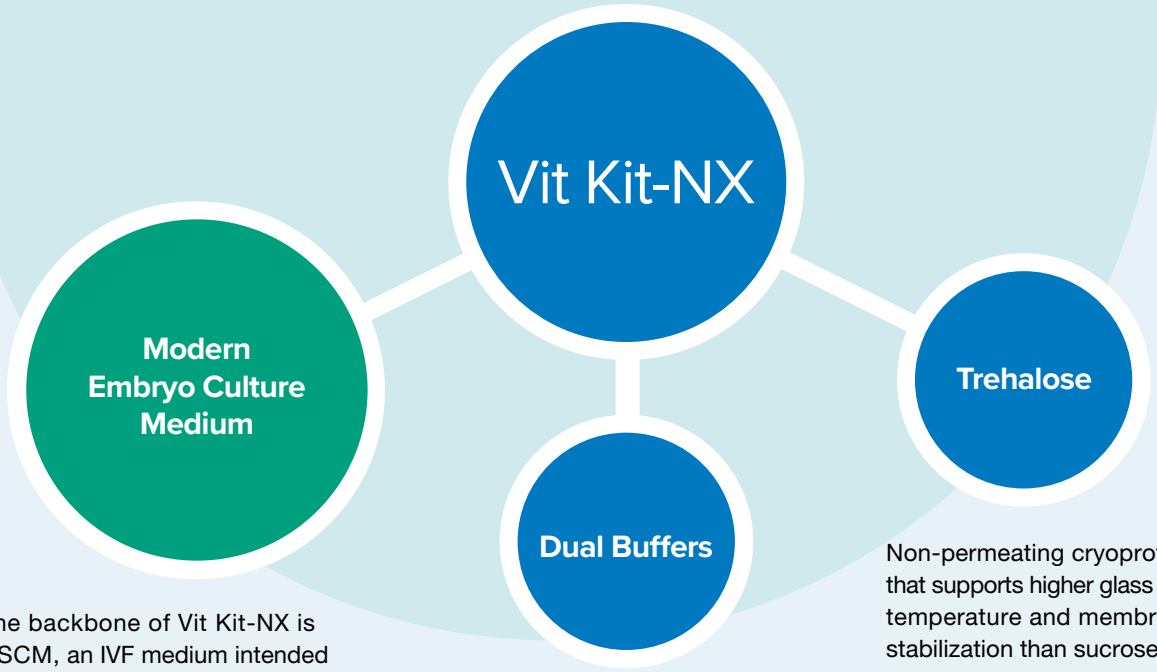
Strong Performance of Oocytes Vitrified and Warmed with Vit Kit-NX

Oocyte Performance	
Total Warmed (n):	123
Survival Rate:	98.4%
Fertilization Rate:	79.3%
Blast Utilization Rate:	61.5%
Euploidy Rate (PGT-A Tested):	74.1%
Clinical Pregnancy Rate:	63.0%

Vit Kit-NX performance on oocytes was calculated using data collected from 123 oocytes (22 donor cycles). Data were collected and provided courtesy of Dr. Matthew “Tex” VerMilyea, VP of Scientific Advancement, Ovation Donor Services, USA.

Enhanced IVF Media for Better Vitrification

Vit Kit-NX integrates key ingredients used in the culture and handling steps of IVF with recent advancements in vitrification to provide a next-generation cryopreservation solution.



The backbone of Vit Kit-NX is CSCM, an IVF medium intended for conventional fertilization, as well as culture from Day 1 and beyond.

CSCM delivers a consistent, embryo-friendly environment through the IVF cycle.

Vit Kit-NX is buffered by both HEPES and MOPS to provide a more secure pH environment for oocytes and embryos during vitrification.

Non-permeating cryoprotectant that supports higher glass transition temperature and membrane stabilization than sucrose.

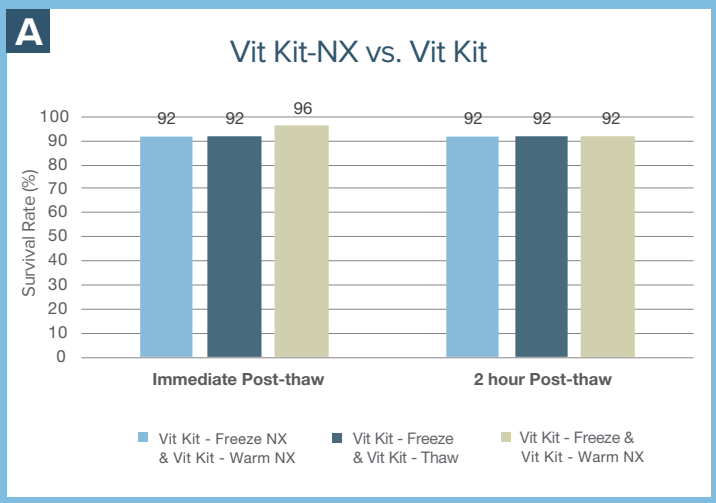
Increased Embryo Implantation and Pregnancy Rates

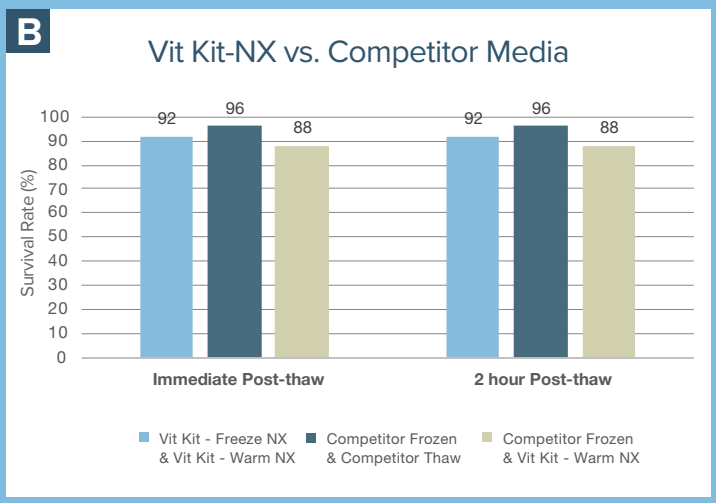
Embryo Performance	Before	Cross-Warming	After
	Vit Kit - Freeze & Vit Kit - Thaw	Vit Kit - Freeze & Vit Kit - Warm NX	Vit Kit - Freeze NX & Vit Kit - Warm NX
Total Warmed:	2,343	310	229
Survival Rate:	97.7%	99.2%	98.8%
Single Embryo Transfer Rate:	78.4%	81.9%	89.1%
Implantation Rate:	49.6%	54.0%	56.5%
Clinical Pregnancy Rate:	56.0%	60.0%	60.3%

Excellent performance was observed in embryos vitrified and warmed with Vit Kit - Freeze NX and Vit Kit - Warm NX. Embryos were first vitrified with Vit Kit - Freeze and warmed with Vit Kit - Warm NX (cross-warming), and it was demonstrated that high implantation and pregnancy rates could be achieved, and that results were equivalent to utilizing Vit Kit - Thaw.

Performance remained consistent after vitrifying embryos with the new Vit Kit - Freeze NX and warming with the new Vit Kit - Warm NX (after), indicating a smooth transition to the Vit Kit-NX suite. Study was performed by Houston Fertility Institute, Texas, USA.

Versatile Formulas Deliver Consistent Survival Rates Across Different Vitrification Media





Vit Kit - Warm NX was capable of warming human oocytes frozen in Vit Kit (A) and a top competitor's vitrification media (B). Previously frozen MII oocytes were re-frozen in different vitrification media with the Cryolock device. MII oocytes were counted towards the survival rate and were recovered in CSCM-NXC for the immediate and 2h post-thaw time points. Study was performed in collaboration with World Egg Bank in Phoenix, Arizona, USA.

Vit Kit-NX Performance vs. Competitor's Vitrification Media

	Vit Kit - Freeze NX & Vit Kit - Warm NX	Competitor Freezing & Warming Media
Total Warmed (n):	65	69
Clinical Pregnancy Rate:	58.5%	49.3%

Data were collected between May 2020 and January 2021 at Yamashita Shonan Yume Clinic, Japan, via single Day 5 blastocyst transfer after vitrification and warming in either Vit Kit - Freeze NX and Vit Kit - Warm NX by FUJIFILM Irvine Scientific, or competitor's freezing and warming media.

Flexible Vitrification Solutions for the Modern IVF Laboratory

Vit Kit - Freeze NX

Vit Kit - Freeze NX is an adaptable, cost-effective system for use in the vitrification of oocytes, pronuclear zygotes, cleavage stage embryos, and blastocyst stage embryos. Each kit can be used for up to 50 freezing applications for oocytes and 60 applications for embryos.

- Reduce costs by using less media with our microdrop protocol
- Minimize waste with a one-year shelf life for unopened products and two-week shelf life for open products
- Ready to use—no mixing required
- Compatible with any vitrification device
- Contains no phenol red

Vit Kit - Warm NX

Vit Kit - Warm NX is an adaptable, cost-effective system for use in the thawing of oocytes, pronuclear zygotes, cleavage stage embryos, and blastocyst stage embryos. Each kit can be used for up to 12 warming applications with embryos or oocytes.

- Simplify the workflow with a flexible kit configuration
- Minimize waste with a one-year shelf life for unopened products and two-week shelf life for open products
- Ready to use—no mixing required
- Contains no phenol red

Ordering Information

Media	Catalog #	Size	Additional Information	Shelf Life	Storage
Vit Kit - Freeze NX	90188	3x1 mL Equilibration Solution 3x1 mL Vitrification Solution 1x1 mL Washing Solution	- Dual-buffered solution (HEPES and MOPS) of Continuous Single Culture Medium (CMSM) containing Gentamicin Sulfate - Contains Dimethyl Sulfoxide (DMSO) and Ethylene Glycol (EG) - 50 applications with oocytes & 60 applications with embryos	1 year* 2 weeks after opening	2-8° C
Vit Kit - Warm NX	90183	6x2 mL Thawing Solution 2x1 mL Dilution Solution 4x1 mL Washing Solution	- Dual-buffered solution (HEPES and MOPS) of CMSM containing Gentamicin Sulfate - Contains Trehalose - 12 applications with oocytes and embryos	1 year* 2 weeks after opening	2-8° C

All of our vitrification and warming media are for use with oocytes (MII), pronuclear (PN) zygotes through day 3 cleavage stage embryos and blastocyst stage embryos.

All of our vitrifiation media are supplemented with Dextran Serum Supplement (DSS) at 20% (v/v) for a final concentration of 10 mg/mL Human Serum Albumin (HSA) and 4 mg/mL Dextran.

*From date of manufacture

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