VITRIFICATION
CRYOTOP®
Kitazato is recognized as one of the pioneering brands in driving and improving vitrification. Its greatest contribution in this field has been the development of the renowned Cryotop® Method, the global leader in vitrification of oocytes and embryos, in all stages of development.

Cryotop® is the special vitrification container consisting of a fine, thin film strip attached to hard plastic handle for the minimum volume cooling to realize highest cooling & warming rates resulting in over 90% post-thaw survival. The Cryotop® Method is simple, reliable, universal safe and easy for anyone. After over a decade on the market, the Cryotop® Method has been applied in over 1,500,000 clinical cases in over 90 countries and 2,200 assisted reproduction centers. Hundreds of scientific publications certify their excellent results.
THE CRYOTOP® METHOD

**MAIN ADVANTAGES**
- Survival rates over 90%.
- Best Cooling and Warming rates in the market.
- Closed and Open system available. Same protocol, easy to follow.
- Valid for all stage of development: oocytes, PN, embryos, blastocysts.

**VERSATILITY**
- Egg Banking: to avoid difficult synchronization donor-recipient.
- PGD/PGS Analysis: grant the survival of your biopsied embryos.
- Fertility Preservation.
- Re-Vitrification: transfer of vitrified embryos from previously vitrified specimens.
- Deferred Embryo Transfer: to optimize the conditions of the endometrium before the transfer.
- Management of poor responders: accumulation of oocytes.

**STANDARIZATION**
- Simplifies work routines.
- Helps optimizing scientific and global results.
- Speeds up the workflow.
- Makes easier the stock management.
- Reduces costs.
WHY DO WE HAVE THE BEST SURVIVAL RATES?

Thanks to its protocol and the revolutionary design of its device, the Cryotop® Method has the best Warming Rate on the market for Open System and Closed System. Several studies have shown that the Warming Rate is one of the crucial factors for increasing survival rates.

All of this is possible due to the minimal volume required for proceeding with vitrification. Both Cryotop® and Cryotop® SC allow the loading of specimens with a volume of 0.1µl; this minimal volume allows the reduction of the concentration of “cryoprotectant agents”, increasing the likelihood of vitrification.

There are excellent survival rates for oocytes and embryos in all stages of development, reported in numerous clinical publications with the largest study samples in the whole sector.
THE WORLD LEADER IN CRYOPRESERVATION

CRYOTOP® IS AVAILABLE IN 93 COUNTRIES SPREAD AMONG ALL CONTINENTS

Leadership based on guaranteed quality, versatility and commitment with IVF professionals.

2,400 CLINICAL PAPERS
PUBLISHED USING CRYOTOP®

2,200 CLINICS
PUT THEIR TRUST IN CRYOTOP®

8,000,000 CRYOTOP® UNITS SOLD WORLDWIDE

500 EMBRYOLOGISTS TRAINED PER YEAR

Kitazato has an international plan for constant training, focused on helping all embryologists to obtain the excellent results provided by the Cryotop® Method.
Cryotop® is a vitrification device consisting of a fine strip of transparent film attached to a plastic handle resistant to liquid nitrogen.

Cryotop® is the logical choice for obtaining the best clinical results. Its unparalleled survival rates for oocytes and embryos, at every stage of development, have contributed to bringing hundreds of healthy babies into the world in the last decade. *Available in 5 different colors.*

Its design allows the loading of specimens for vitrification with a minimum volume (0.1 µl), providing the best Cooling and Warming rates on the market (-23,000°C/minute and 42,000°C/minute respectively) which in turn lead to the best survival rates.
Media

VT801 - Kitazato Vitrification Solutions

Kitazato Media are the most versatile option for cryopreservation in your laboratory. Reduce your costs by using the same media for vitrification and warming of oocytes and embryos, in all their stages of development, from Zygote Stage to Blastocyst. The composition of the Kitazato media is entirely synthetic. VT601/602 available in selected countries.

VT802 - Kitazato Thawing Solutions

- Vial 1.5 mL of BS (Basic Solution)
- Vial 1.5 mL of ES (Equilibration Solution)
- Vial 1.5 mL of VS (Vitrification Solution)
- Vial 4.0 mL of TS (Thawing Solution)
- Vial 4.0 mL of DS (Diluent Solution)
- Vial 4.0 mL of WS (Washing Solution)

Quality Control
- pH: 7.2 - 7.6
- Osmolarity
- Endotoxin: <0.25EU/mL by LAL methodology
- Sterility (Bacteria, Fungi): current USP Sterility Test <71>
- MEA (Mouse Embryo Assay): One cell assay ≥80% after 96 hours

Composition
- HEPES within Basic Culture Media - Ethylene Glycol
- Dimethyl Sulfoxide
- Trehalose
- Hydroxypropyl Cellulose
**REPRO PLATE**

Exclusively designed to follow the vitrification protocol with comfort; offers two slots to support the Cryotop®, allowing those who wish to carry out loading specimens statically. Has a flat base which allows the use of traceability labels.

**COOLING RACK**

Designed to contain the liquid nitrogen during vitrification. Metallic cover for the interior also available, allowing sterilisation before use.
**CRYOTOP® SC CLOSED SYSTEM**

Cryotop® SC is an evolution in vitrification with the Closed System of the successful Cryotop®; it allows the device to be sealed within a straw, allowing the vitrification of the specimens without them entering into direct contact with the liquid nitrogen. Its new sealed protocol ensures success during vitrification guaranteeing safe storage.

*Available in 5 different colors.*

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**L shaped tip to protect the specimen from an abrupt arrival at the end of the external straw during the insertion.**

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**HEAT SEALER**

With a rapid application it allows the easy sealing of the external straw of the Cryotop® SC.

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**STRAW CUTTER**

Allows the external straw to be cut during the vitrification and warming processes.

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**ALUMINUM BLOCK**

Block of aluminium with three preset positions; guarantees success in the insertion and sealing process as well as the effective extraction of the Cryotop® from the straw during warming.
CLINICAL REFERENCES

**OOCYTES**


**EMBRYOS**

Zhu D., Vitrified-warmed blastocyst transfer cycles yield higher pregnancy and implantation rates compared with fresh blastocyst transfer cycles-time for a new embryo transfer strategy? Fertility & Sterility, 2011.


Cobo A., Outcome of cryotransfer of embryos developed from vitrified oocytes: double vitrification has no impact on delivery rates. Fertility & Sterility, 2013.


**FERTILITY PRESERVATION**


Cobo A., Oocyte vitrification as an efficient option for elective fertility preservation. Fertility and Sterility, 2016.

**PGD/PGS**


Rodríguez-Purata J., Reproductive outcome is optimized by genomic embryo screening, vitrification, and subsequent transfer into a prepared synchronous endometrium. Journal Assisted Reproduction Genetics, 2016.

**DEFERRED EMBRYO TRANSFER**


**FREEZE ALL**


**OTHER CRYOBIOLOGY ARTICLES**


QUALITY RESULTS FOR LIFE

Kitazato applies the philosophy of continuous improvement. We cooperate with some of the most important fertility clinics in the world, listening attentively to their suggestions and adapting to the results of their research and their daily work to develop new methods to combat infertility and constantly improve our products.

Our relationship with the clinics is very close thanks to our international training programme. We constantly organise workshops and talks for embryologists and doctors where they have the opportunity to see and learn about the correct use of our products. We are willing to share with you our experience so that you can obtain the quality results that we are capable of offering.

Because quality is the raison d’être of Kitazato; we believe in it from start to finish, from the selection of raw materials to the delivery of products to the clinics. This is our main objective, our daily challenge: to offer the highest standards of quality to guarantee that our clients achieve the best results, and thus be able to make the patients’ dreams of being parents a reality.