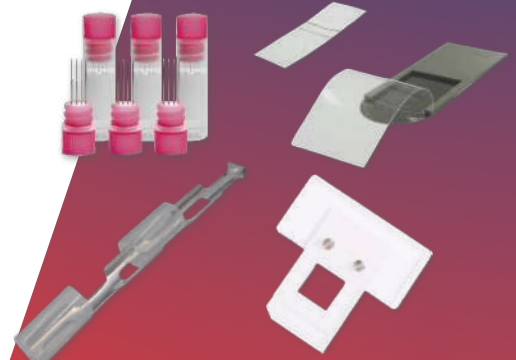


PRODUCT CATALOGUE

Ova Cryo Kit

Ova Thawing Kit

- Ovarian Tissue Vitrification -



**Quality Results
for Life**

- Media and devices for ovarian tissue vitrification and thawing.
- Square Measure is a template that helps to prepare ovary into dimensions of 10 x 10 x 1mm.
- Cryodevices are available in both closed and open system.
- Ova Rinse is medium for washing and keeping ovary to prevent it from drying before vitrification procedure. Ova Culture is recommended for extended culture after thawing.

Collaborative Development

Prof. Nao SUZUKI, M.D., Ph.D., Obstetrics and Gynecology, St. Marianna University School of Medicine
Yoshiharu MORIMOTO, MD., Ph.D., CEO, HORAC GRAND FRONT OSAKA CLINIC

REF	Code	Product Name	Details
82212	VT301S	Ova Cryo Kit Type M	Cryo1-20mL、Cryo2-20mL、Cryo3-20mL
82222	VT302S	Ova Thawing Kit Type M	Thaw1-100mL、Thaw2-20mL、Thaw3-20mL
82215	OVR-100	Ova Rinse	100mL
82216	OVCL-100	Ova Culture	100mL
82217	OVCM-100	Ova Culture with HEPES	100mL
81212	Square Measure	Square Measure (Cutter Plate)	5pcs/pk
81213	ODT × 10	Ova Cryo Device Type M (Open System)	10pcs/pk
81214	OCS10	Ova Cryo Sheet (Closed System)	10pcs/pk Extra pouch for Cryo Device×2 Cane for Ova Cryo Sheet : KOCC ×1
81215	KOCC10	Ova Cryo Sheet Cane	10pcs/pk

COMPONENTS

VT301S / VT302S

HEPES within Basic culture medium /
Ethylene glycol / Gentamicin /
Human serum albumin / Sucrose

OVR-100 / OVCL-100 / OVCM-100

Calcium chloride / Gentamicin / Glucose /
Human serum albumin / Magnesium sulfate /
Potassium chloride / Potassium phosphate /
Sodium bicarbonate / Sodium chloride /
Sodium lactate / Sodium pyruvate
OVR-100 / OVCM-100 : HEPES

QUALITY CONTROL

VT301S / VT302S

pH7.2-7.6 / Osmolality / Endotoxin <0.25EU/mL / Sterility Test
Storage: 2-8°C
Shelf Life: 12 months

OVR-100 / OVCL-100 / OVCM-100

pH7.2-7.6 / Osmolarity 270-295mOsm/L / Endotoxin <0.25EU/mL /
Sterility Test / Mouse embryo assay ≥80%
Storage: 2-8°C
Shelf Life: OVR-100 / OVCM-100: 8 months
OVCL-100: 4 months

ODT×10 / OCS10 / Square Measure

Endotoxin ≤0.5EU / unit(EU/mL) / Mouse embryo assay ≥80%
Storage: 15-30°C
Shelf Life: 3 years

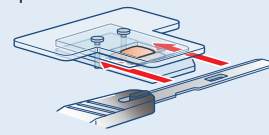
PROTOCOL

Vitrification

- 01** Wash an ovary with Ova Rinse (REF. 82215).
Use a surgical knife and to cut it into dimensions of 10 x 10 x 1mm. Take care to maintain tissue wet by using Ova Rinse throughout the process.

Note: By using Square Measure (REF. 81212), the ovary can be easily cut to appropriate size.

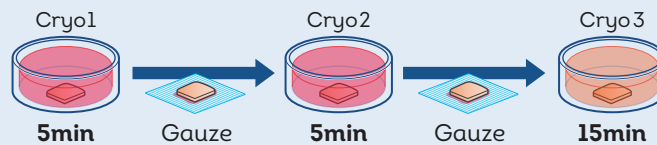
Square Measure



ovarian tissue
(10×10×1mm)

- 02** Equilibrate the ovarian tissues cut into appropriate sizes with Ova Cryo Kit Type M (REF. 82212) prepared to room temperature; equilibrate it in Cryo1 for 5 minutes, Cryo2 for 5 minutes, and Cryo3 for 15 minutes.

Note: Before transferring to the next media, gently wipe the ovarian tissue with gauze to minimize previous media.

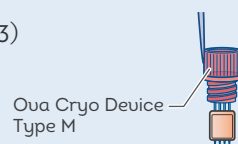


- 03** After the equilibration in Cryo3, wipe the ovarian tissue with gauze and place it on the cryodevice maximizing its surface area.

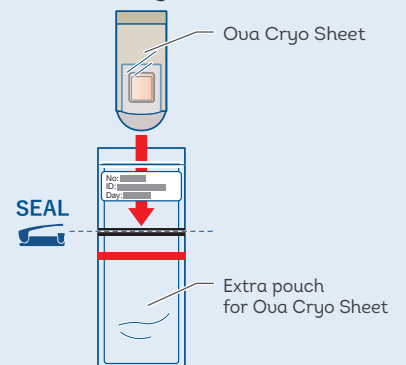
(A) Open System : Ova Cryo Device Type M (REF. 81213)
Place the ovarian tissue on its metal part.

(B) Closed System : Ova Cryo Sheet (REF. 81214)
Flip its film and place the ovarian tissue on it.
Flip back the film, expel air using fingers or tweezers.
Insert it into the pouch, expel air, and seal the pouch at the black line using a heat sealer.

(A)
Open System



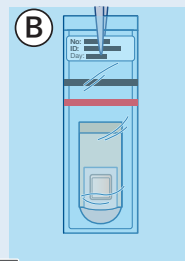
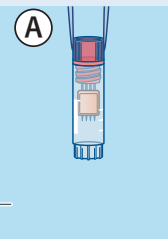
(B)
Closed System



- 04** (A) Plunge the cryodevice into liquid nitrogen, then close the cap.

(B) Plunge the cryodevice into liquid nitrogen.

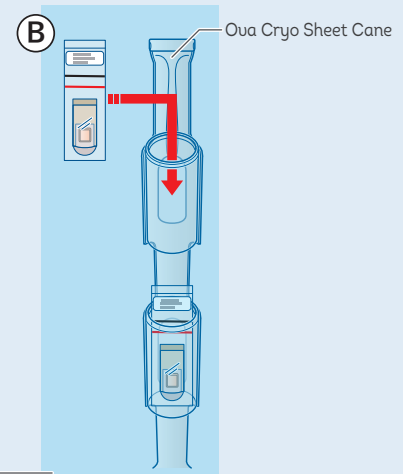
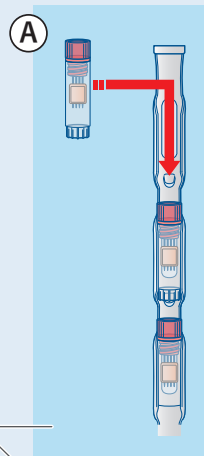
Liquid nitrogen



- 05** (A) Place the cryodevice on the cane and store it in a tank.

(B) Place the cryodevice to Ova Cryo Sheet Cane (REF. 81214, 81215) and store it in a tank.

Liquid nitrogen



PROTOCOL

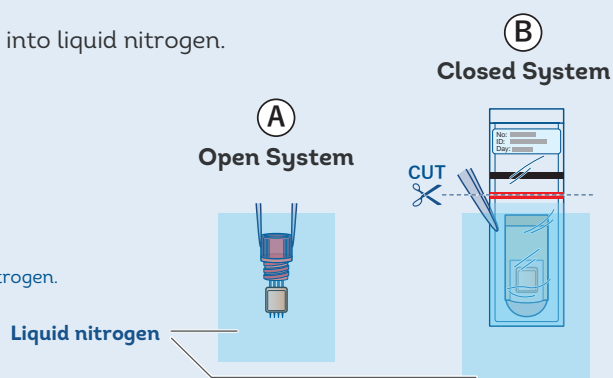
Thawing

01 Remove the cryo device from the tank and immerse it into liquid nitrogen.

(A) Open System : Ova Cryo Device Type M
Open the cryodevice in liquid nitrogen.

(B) Closed System : Ova Cryo Sheet
Cut the sealed pouch along the red line
in liquid nitrogen.

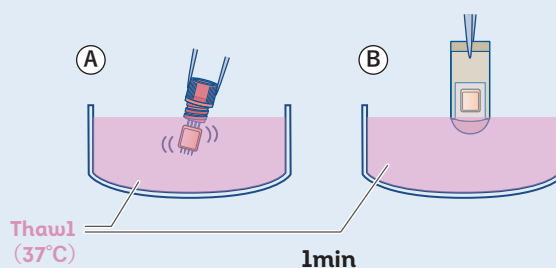
Note: Avoid direct contact between the Cryo Sheet and liquid nitrogen.



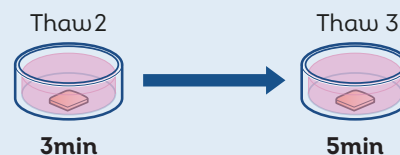
02 Thaw using Ova Thawing Kit Type M (REF. 82222).

(A) Plunge the cryodevice into Thaw1 warmed to 37°C
in the water bath.
Shake it in Thaw1 to detach the ovarian tissue.

(B) Remove the cryodevice from the pouch and transfer it
into Thaw1 brought to 37°C in the water bath.



03 Transfer the tissue from Thaw1 to Thaw2 at room temperature
and leave it for 3min. Then, transfer the tissue from Thaw2 to
Thaw3 at room temperature and leave it for 5min.



04 After 5 min in Thaw3, culture the tissue for recovery before transplantation.

- If transplant immediately after thaw, culture in Ova Culture with HEPES (REF. 82217) for 30 min.
- For recovery culture more than 30 min, use Ova Culture (REF. 82216) in an incubator.

Specification may change without pre-notice for purpose of product improvement.

Kitazato Corporation

HEADQUARTERS : 100-10 Yanagishima, Fuji, Shizuoka 416-0932 JAPAN

TOKYO : 1-1-8 Shibadaimon, Minato-ku, Tokyo 105-0012 JAPAN

Mail contact@kitazato.co.jp