

Sil-Select Plus™*

Gradient system for semen preparation.

Sil-Select Plus is sterilized by aseptic filling:

STERILE	A
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DESCRIPTION

Sil-Select Plus is a gradient system for semen preparation.

Sil-Select Plus gradients consist of silane-coated colloidal silica particles suspended in HEPES-buffered EBSS (Earle's balanced salt solution).

The Sil-Select Plus system can be used in combination with IUI, IVF and ICSI.

MATERIAL INCLUDED WITH THE KIT

Productcode: SIP-16 16 preparation kit

2 x 20mL Sil-Select Plus LOWER LAYER

2 x 20mL Sil-Select Plus UPPER LAYER

5 x 20mL Sil-Select Plus WASHING/INSEMINATION medium^s

Productcode: SIP-50 2x50ml

1x50mL Sil-Select Plus LOWER LAYER

1x50mL Sil-Select Plus UPPER LAYER

Productcode: SIP-100 2x100ml

1x100mL Sil-Select Plus LOWER LAYER

1x100mL Sil-Select Plus UPPER LAYER

MATERIAL NOT INCLUDED WITH THE KIT

- 3cc syringes with 1 1/2" 21g needle
- Centrifuge (must be able to operate for up to 30 minutes at 300g)
- Incubator or water bath at 37°C (optional)
- SIP-50 / SIP-100: WASHING/INSEMINATION medium

CALCULATION OF G-FORCES

The g-force of your centrifuge can be calculated using this formula:

$$g = 1.118 \times r \times \text{rpm}^2 \quad \text{or} \quad \text{rpm} = \text{Square root} \left\{ \frac{g}{(1.118 \times r)} \right\}$$

r = radius of centrifuge in mm

rpm = rotations per minute / 1000

e.g.1

$$r = 100 \text{ mm} \quad \text{rpm} = 1800 \text{ rotations per minute}$$

$$g = 1.118 \times 100 \times 3.24 = 362g$$

e.g.2

$$r = 100 \text{ mm} \quad g = 350g$$

$$\text{rpm} = \text{SQR} \left\{ \frac{350}{(1.118 \times 100)} \right\} = 1.77$$

$$= 1770 \text{ rotations per minute}$$

INSTRUCTIONS FOR USE WITH FRESH SEMEN SAMPLES

1. Bring all components of the system and samples to room temperature or to 37°C.
2. Transfer 2.5mL of Sil-Select Plus upper layer into a sterile disposable centrifuge tube.
3. Using a 3cc syringe with a 1 1/2" 21g needle, place 2.5mL of Sil-Select Plus lower layer under the upper layer. Take care that the two layers are distinctly separated. This is done by placing the tip of the needle on the bottom of the test tube and slowly dispensing the Sil-Select lower layer.
This two layer gradient is stable for up to two hours.
4. Gently place up to 2.5mL of liquefied semen onto the upper layer using a transfer pipette or syringe.
5. Centrifuge for 15 to 18 minutes at 350g to 400g. When

this centrifugation is completed you may not be able to visibly see a pellet. If so, it is essential to continue the procedure with a second centrifugation of 3 minutes.

6. Remove supernatant down to the pellet.
7. Using a syringe, add 2-3mL of sperm washing medium and re-suspend the pellet.
8. Centrifuge for 8 to 10 minutes at 300g, higher sperm concentration will require the maximum 10 minutes centrifugation to ensure a complete and thorough sperm wash.
9. Remove supernatant down to the pellet and repeat steps 7 and 8.
10. Remove supernatant and replace with a suitable volume of appropriate medium.

INSTRUCTIONS FOR USE WITH FROZEN SEMEN SAMPLES

1. Bring all components of the kit and samples to room temperature or to 37°C.
2. Transfer 1mL of Sil-Select Plus upper layer into a sterile disposable centrifuge tube.
3. Using a 3cc syringe with a 1 1/2" 21g needle, place 1mL of Sil-Select Plus lower layer under the upper layer. Take care that the two layers are distinctly separated. This is done by placing the tip of the needle on the bottom of the test tube and slowly dispensing the Sil-Select lower layer. This two-layer gradient is stable for up to two hours.
4. Gently place the thawed semen sample onto the upper layer using a transfer pipette or syringe (0.5mL maximum).
5. Centrifuge for 20 minutes at 350g.
6. Remove supernatant down to no less than the 0.5mL mark above the pellet.
7. Using a syringe, add 2-3mL of sperm washing medium and resuspend the pellet.
8. Centrifuge for 8 to 10 minutes at 300g.
9. Remove supernatant down to the pellet and repeat steps 7 and 8.
10. Remove supernatant and replace with a suitable volume of appropriate medium.

If samples do not liquefy and therefore do not pass through the layers, increasing the centrifugal force up to, but no more than, 500 g will help to separate the sperm.

STORAGE AND CONSERVATION

Store reagents at 2-8°C when not in use. Open and close bottles under aseptic conditions. Content can not be re-sterilized after opening.

WARNINGS AND PRECAUTIONS

All human, organic material should be considered potentially infectious.

Handle all specimens as if capable of transmitting HIV or hepatitis. Always wear protective clothing when handling specimens.

Sil-Select Plus does not contain antibiotics, if required add your own antibiotics (e.g. penicillin at 100 units per mL).

*Sil-Select Plus is a trademark of FertiPro N.V., Belgium

^sWashing/Insemination medium is not a CE marked product

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