EquiPro™ is a culture medium for stallion semen conservation and is also suitable as a centrifugation extender for stallion semen.

Technical Information
EquiPro™ is a completely defined and standardized medium based on specific caseinates which have been proven to be most effective for the preservation of stallion semen. Caseinates are derived from the various fractions of milk casein and highly purified by modern processing technologies. EquiPro™ also contains several sugars and buffers. Some variations of EquiPro™ contain gentamicin in a concentration to control bacterial growth. 1000 cc of these versions contain 0.5 g gentamicin sulphate.

The pH of the ready made extender is 7.0 ± 0.3, Osmolality is ± 315 ± 10 Osm/kg.

EquiPro™ is available as a liquid medium and in powdered form. Liquid EquiPro™ is a sterile, milky white solution. This medium only requires to be warmed up and is then ready for use. Powdered EquiPro™ is a white powder which has to be dissolved in purified water prior to use.

Quality control
All used raw materials are produced according to GMP and DIN ISO 9001:2000 norms, and are certified after PhEur, BP or USP standards. They are tested according to international valid quality guidelines concerning the testing of pharmaceutical substances and meet these requirements. Each single component of each extender batch is tested chemically, physically and spermatologically under specialized veterinarian supervision for their adequacy for semen conservation. Certificates of Analysis and testing protocols comply with full traceability.

Mixing and manufacturing of the powdered extender is performed under GMP conditions and documented with weighing records. The completed mixtures are tested again chemically and physically for spermatologic adequacy as well as under practical conditions for the suitability of semen conservation under specialized veterinarian supervision, and by independent organizations.

Recommended application
Preparation of chilled semen
The freshly collected stallion semen is maintained at a temperature of +30°C to +33°C and analysed. After removing the gel, its volume, concentration and motility are determined and depending on the desired number of normal progressive motile sperm cells in the insemination dose, the amount of required extender is calculated (the EquiPro™ manual provides the exact calculation formula). The temperature of extender and semen has to be equal at the moment of the first dilution (+/-1°C). The extender is slowly added to the filtered, gel-free ejaculate and mixed gently.
After the dilution, the semen no longer needs to be held in warm conditions. The recommended cooling rate is 0.05° to 0.1°C per minute, respectively within 2.5 to 5 hours from ambient temperature to +5°C. Afterwards, the semen should be constantly kept at +5°C until its application. For the transportation of the semen at optimum conditions, Minitüb offers specially designed transport boxes (Ref.No. 17229/0001 and /0002) for shipping chilled semen.

**EquiPro™** qualifies for the conservation of semen for up to 2 days at approx. +5°C. A daily quality analysis until the application is recommended.

**Centrifugation**

The prepared extender and the gel-free ejaculate are mixed 1+1. Centrifugation is performed at 500-800 g for 5-10 minutes. After centrifugation the supernatant fluid is removed and the pellet resuspended with extender for chilled or freezing semen. In order to achieve a higher yield of sperm cells, we recommend applying CushionFluid (Ref.No.13580/0001).

**Packing sizes and alternatives**

**EquiPro™** liquid with gentamicin sulphate in a glass bottle, 100 cc

13570/0301

**EquiPro™** concentrate in powder form with gentamicin sulphate in a foil sachet

13570/0202 for 1 Litre
13570/0210 for 100 cc

**EquiPro™** concentrate in powder form without antibiotics, in a foil sachet

13570/0201 for 1 Litre
13570/0211 for 100 cc

**EquiPro™** concentrate in powder form with gentamicin sulphate, with highly purified water, in 2 bottles: one bottle with **EquiPro™** in powder form, for preparing 100 cc of extender, the second bottle with 100 cc purified water

13570/0302

**Storage and shelf life**

All **EquiPro™** variations have to be stored in cool (below +10°C), dry and dark conditions. The minimum shelf life and the lot number are printed on each label.

Readily dissolved extender can be kept up to 3 days if stored in the refrigerator (+5°C). It can also be aliquoted and stored at -18°C for approx. 6 months.

**Literature**


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