

PRODUCT: RAMPLUS-0.5

PRODUCT NO: RP050

**INDICATIONS**

For increasing the percentage of male offspring in sheep species.

**DOSAGE**

One unit (0.50 ml) of semen per vial.

**NOTICE**

This is not a restricted drug. RAMPLUS is a non-prescription biopharmaceutical agent. Federal law (US) does not require that this product be used by or on the order of a licensed veterinarian. Please check with local regulations.

**DESCRIPTION**

RAMPLUS is spermagenic agent for sexing ram semen. Packaged in kit form, each dose is sealed in a vial to maintain potency during storage. The agent is activated by adding semen directly to the RAMPLUS vial. The sexed semen is returned to the original straw and inseminated as usual.

**MODE OF ACTION**

RAMPLUS works by enhancing fertility of the Y-chromosome (male) sperm and reducing fertility of the X-chromosome (female) sperm. After insemination, the sexed sperm sort in the reproductive tract of the ewe. The result is the ewe will have more ova fertilized by the Y-chromosome (male) sperm. The percentage of male lambs is increased 20-25% (Ave.75%) and overall lambing rates are increased from 5-15%.

**KIT INSTRUCTIONS**

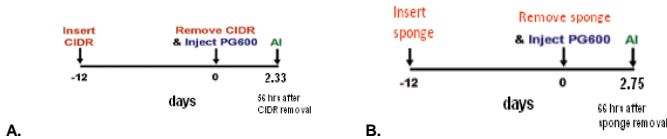
- Warm RAMPLUS vial to 95-98.6°F (35-37°C) to prevent cold shock to semen. Thaw semen as usual.
- Cut the end of semen straw at a 60 degree bevel
- Insert the cut-end of semen straw through the rubber septum in the RAMPLUS vial.
- Add semen to vial by grasping both the vial and straw in the palm of the hand and snapping downward 3-4 times (similar to shaking a glass thermometer). Be certain all semen is in vial.
- Gently mix semen with contents of vial.
- When inseminating with straws, transfer the enriched semen back into the original straw by inverting and then shaking downward 3-4 times. When using laparoscopic insemination, incubate and store semen in vial.
- **IMPORTANT:** Incubate the enriched semen in water bath for **30 minutes** at 95-98.6°F (35-37°C) prior to insemination. Alternatively, incubate in a dry incubator or "gun warmer".
- Load semen into insemination pipette/gun and inseminate.

**TIMING OF INSEMINATION**

Variations in synchronization protocols, superovulation regimens and breed differences will give rise to variations in the *time of onset of heat* and *time of ovulation*. These variances are important when using fixed-time breeding. For fixed-time inseminations, please consult the following recommendations. In general, apply RAMPLUS 4-6 hours prior to ovulation. Ovulation occurs 24-27 hours after onset of heat or 65 hours after sponge removal.

1. Synchronized with progestin implant (CIDR®) + PMSG (PG 600®, Folligon®) or FSH: Fixed-timed inseminations: Breed 56 hours after progestin withdrawal. See Fig. 1A
2. Synchronized with progestin implant (pessary sponge) + PMSG (PG 600®, Folligon®) or FSH: Fixed-timed inseminations: Breed 66 hours after progestin withdrawal. See Fig. 1B.
3. Synchronized heats and natural heats: Estrus detection: Breed 32 hours after marking by vasectomized male.

Fig. 1. Fixed-timed estrus synchronization protocols for sheep.



**STORAGE CONDITIONS**

Keep in freezer compartment (-4°F; -20°C). Avoid moisture and sunlight. Reseal unused product in packet during storage.

**HOW SUPPLIED**

RAMPLUS is lyophilized in the following package sizes: 0.25 ml, 0.5 ml single-dose vials, and 10 unit multi-dose vials.

**WARNINGS**

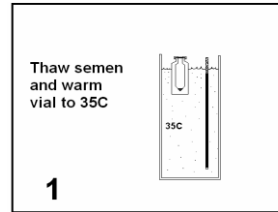
KEEP OUT OF REACH OF CHILDREN.

Mfg by: **EMLAB GENETICS LLC, Arcola, IL 61910 USA**

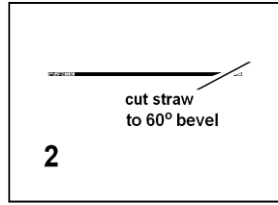
Questions? Call: 708-442-3964 Log on: [www.emlabgenetics.com](http://www.emlabgenetics.com)

RAMPLUS is a trademark of EMLAB GENETICS LLC

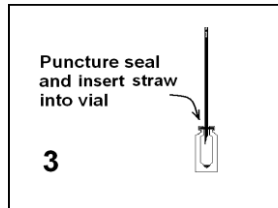
**KIT INSTRUCTIONS**



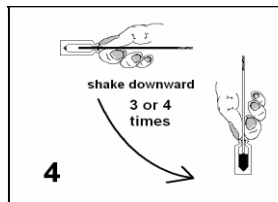
1. Warm the vial to 95-98.6°F (35-37°C) using a water bath, tube warmer or incubator for a few minutes (to prevent cold shock). Thaw semen as usual.



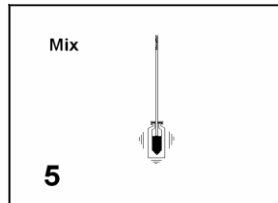
2. Cut straw to a 60° bevel with sharp scissors. Note: Remove paper label from top of vial.



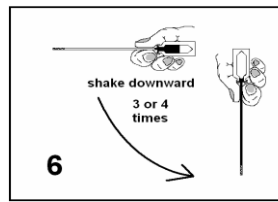
3. Puncture seal with 14 G needle and insert the cut-end of the straw into the vial.



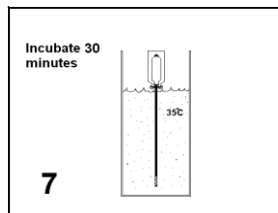
4. To add semen to the vial, grasp both the vial and straw in the palm of the hand and shake downward 3 or 4 times (similar to shaking a glass thermometer). Be certain all semen is in the vial.



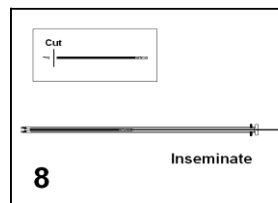
5. Gently mix semen with contents of vial.



6. Transfer the enriched semen from the vial back into the straw. Do this by grasping the vial and straw in an inverted position and again shaking downward 3-4 times. Be certain all semen is in the straw.



7. Incubate enriched semen at 95-98.6°F (35-37°C) for 30 minutes.



8. Remove straw from water bath. Dry. If necessary, cut bevel from straw. Load straw into insemination pipet. Inseminate according recommended protocols.