

Pluset

Superovulation raised to maximum potency



Used by experts around the world with optimal results!





Pluset®



Pluset[®] is a porcine pituitary extract which contains both gonadotropins, follicle stimulating hormone (**FSH**) and luteinizing hormone (**LH**) needed to induce growth and posterior maturation of multiples follicles.

FSH and LH activity is measured in International Units (IU). IU are defined as a measurement of biological activity of a compound and it is used for biologically active substances such as hormones

The IU that Pluset® contains is measured by an **in vitro bioassay**, based on the cell culture expression of the follicle-stimulating hormone receptor (FSHR) or the luteinizing hormone receptor (LHR), specific for FSH and LH respectively. This in vitro bioassay allows accuracy in the assessments.

In order to obtain viables IN VIVO or IN VITRO embryos, **it is key to customize the amount of IU to each donor** based on: breed and age, base of follicular population, production level, body condition score, risk of negative energy balance, previous response if known. It must be adjusted following the specialist criteria

See general recommendations:

IN VIVO

To obtain embryos **IN VIVO**, the exogenous administration of FSH and LH is crucial. These hormones cause the development of a large number of ovarian follicles, each of which can release an egg that can be fertilized.*

¹ Example: Blonde de Aquitania, Limousine. ² Example: Hereford, Angus. ³ Example: Wagyu, Brandgus-Braford. ⁴ Example: Nelore, Brahaman.

	DOSE (IU)	min - max range
BOVINE BREED	HEIFERS	cows
Holstein	400 - 500	700 - 900
Large beef breed ¹	400 - 500	500 - 700
Medium beef breed ²	350 - 450	450 - 650
Small beef breed ³	250 - 400	350 - 550
Zebu ⁴	250 - 400	300 - 500

IN VITRO

The use of exogenous FSH before follicular puncture (Ovum pick up) improves the stimulatory response and competence of the oocytes, which leads to an increase in the production of **IN VITRO** embryos.**

*B6 & Mapletoft. 2014. Historical perspectives and recent research on superovulation in cattle. Theriogenology Volume 81, Issue 1. **Cameron B. et al. 2023. Effect of use and dosage of p-follicle-stimulating hormone for ovarian superstimulation before own pick up and in vitro embryo production in pregnant Holstein helfers. J. Dairy Sci. 106:8110-8121.

	DOSE (IU)	min - max range
BOVINE BREED	HEIFERS	cows
Holstein	175 - 350	350 - 450
Large beef breed ¹	200 - 300	300 - 400
Medium beef breed ²	175 - 250	225 - 325
Small beef breed ³	150 - 225	200 - 300
Zebu ⁴	100 - 200	200 - 300

PRESENTATION

Two vials of f lyophilized powder + one vial of solvent.

Each vial contains
500 UI of FSH and 500 UI of LH

PREPARATION

Dissolve each vial of freeze-dried product with 10.5 ml of solvent and mix gently.

Each ml of reconstituted solution contains: 50 IU of FSH and 50 IU of LH.



