

# ® EGALITTE

## RECOMBINANT PROTEIN FOR THE TEMPORARY IMMUNE SUPPRESSION OF GONADAL FUNCTION

INJECTABLE SOLUTION – SUBCUTANEOUS

### TECHNICAL SHEET

#### IMMUNOCASTRATION

By injecting **®EGALITTE**, active immunity targeting endogenous GnRH (gonadotropin-releasing hormone) is stimulated to produce temporary immunological suppression of the gonadal function in male and female dogs.

Immunocastration allows for the temporary blocking of testicular function and behaviors related to reproduction (marking, escapades, fights, and mounts) in males and the temporary suppression of estrus in females after the onset of puberty.

**Duration of immunity: 12 months.**

#### Usage indications:

- Non-surgical sterilization.
- Owners who desire reversible castration.
- Dogs where surgical castration is contraindicated (hip dysplasia).
- Dogs for which surgery is contraindicated due to anesthesia risks.
- Treatment for endocrine for endocrine diseases requiring reduced sexual hormone levels in dogs (e.g., dermatosis in females and neoplasms in males).
- To reduce the risk of urinary incontinence in surgically neutered females.

#### Clinical effects:

- Active immune response against endogenous GnRH.
- Rapid reduction of sexual hormones from 15 days.
- Libido reduction.
- Estrus suppression.
- Suppression of reproduction-related behaviors (marking, escapades, fights, and mounts).

Partial sale prohibited.  
Sale under retained veterinary prescription only.

#### Each dose contains

Recombinat protein Gn RX G/Q	0,25 mg
Excipients csp	1 mL
Adjuvant: Chitosan	

#### Usage



DOGS  
Male and Female

#### Patents

- EU 10721286
- USA 0093846A1
- CL 001613
- AR 20100101253
- BR 1005349-2





**MODE OF ACTION**

®**EGALITTE** is a recombinant protein for the temporary (12 months) immunological suppression of the gonadal function in male and female dogs.

Immunocastration is a non-surgical method that uses active immunity to suppress reproductive function in dogs. This method is based on administering a recombinant protein (patented EU 10721286 - USA 0093846A1 - CL 001613 - AR 20100101253 - BR 1005349-2) that induces a specific immune response against endogenous for consistency with above I would keep: GnRH (gonadotropin-releasing hormone), a key hormone in regulating the hypothalamic-pituitary-gonadal axis.

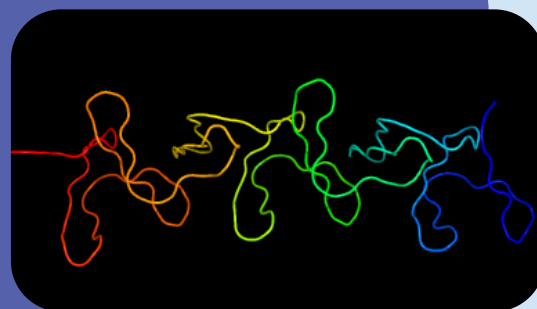
**ONE DOSE PER YEAR\*  
OUTPATIENT TREATMENT**

\*For initiating treatment, administer 2 **subcutaneous** doses with a 30-day interval.

Repeat once a year. In females, immunization should be conducted during the diestrus phase of the estrous cycle.



GnRH is a decapeptide synthesized in hypothalamic neurons and released in a pulsatile manner into the pituitary portal system. Once in the anterior pituitary, GnRH binds to its receptors on gonadotropic cells, stimulating the release of two main hormones: luteinizing hormone (LH) and follicle-stimulating hormone (FSH). These hormones regulate gonadal function (testes and ovaries), promoting testosterone production in males, estrogen production in females, and controlling gametogenesis (spermatogenesis and ovulation).



Protein GnRX/GQ

Immunocastration blocks the function of the hypothalamic-pituitary-gonadal axis through the administration of a recombinant protein, ®**EGALITTE**, which induces the production of antibodies against endogenous GnRH. The process is outlined in the following steps:

- Administration of ®EGALITTE and GnRH Antigen:** ®**EGALITTE** contains a GnRH analog, an immunogenic recombinant protein, and an adjuvant to enhance the immune response. Upon administration, the animal's immune system recognizes this recombinant protein as a foreign antigen, generating specific antibodies against endogenous GnRH..
- Antibody Formation:** Generated antibodies bind to endogenous GnRH, neutralizing it and preventing its interaction with receptors in the anterior pituitary (adenohypophysis). This inhibits the release of LH and FSH, resulting in gonadal suppression.
- Physiological Effects:** The temporary reduction of LH and FSH during the anti-GnRH immune response, leads to a decrease in testosterone production in males and estrogen in females. This causes atrophy of the testes or ovaries, reduces libido and sexual behaviors, and prevents gametogenesis.



**BENEFITS AND APPLICATIONS**

- **Animal Welfare:** Avoids the pain and stress associated with surgery. Reduces post-surgical anxiety and depression.
- **Effectiveness:** Provides an effective and reversible solution for controlling reproduction and reproduction-related behaviors.
- **Environmental Impact:** Reduces the need for surgical interventions and associated complications. Promotes responsible ownership practices by reducing unwanted litters and the population of free-roaming dogs.

**ADVERSE EVENTS**

The administration of immunological products may cause symptoms such as fever, lethargy, and inflammation at the injection site. These reactions, common in subcutaneous dosages, include mild swelling and localized temperature increase at the application site. **Do not use in immunocompromised animals, during pregnancy or suspected pregnancy, or in dogs with a history of infectious dermatitis.**



## Improves our behavior

### Avoiding



Genital licking



Marking with urine



Mounting



Escapades

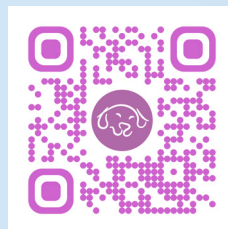


Competition with other males (fights and barking)



Blood spots

The immunological sterilization prevents sexual behaviors in dogs: genital licking, marking with urine, mounting, escapades, competition with other males (fights and barking), blood spots, and among others.



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