PRODUCT INFORMATION



Deslorelin (acetate)

Item No. 34041

CAS Registry No.: Formal Name:	1642579-30-3 6-D-tryptophan-9-(N-ethyl-L- prolinamide)-1-9-luteinizing hormone- releasing factor (swine) acetate
Synonyms:	D-Trp ⁶ -Pro ⁹ -des-Gly ¹⁰ -GnRH ethylamide, pGlu-His-Trp-Ser-Tyr-D-Trp-Leu-Arg-Pro- NHEt
MF: FW:	$C_{64}H_{83}N_{17}O_{12} \bullet XC_{2}H_{4}O_{2} \qquad \qquad$
Purity:	≥98%
UV/Vis.:	λ _{max} : 219 nm
Supplied as:	A solid •XCH3CO2H
Storage:	-20°C
Stability:	≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Deslorelin (acetate) is supplied as a solid. A stock solution may be made by dissolving the deslorelin (acetate) in the solvent of choice, which should be purged with an inert gas. Deslorelin (acetate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of deslorelin (acetate) in ethanol is approximately 10 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Description

Deslorelin is a peptide agonist of gonadotropin-releasing hormone (GnRH).¹ It binds to the GnRH receptor (GnRHR) with a K, value of 0.1 nM. Deslorelin decreases testicular volume, semen volume, sperm motility, and total sperm count, as well as increases the percentage of abnormal sperm, in dogs when administered via a subcutaneous implant at doses of 3, 6, and 12 mg/kg.² It decreases disease severity and plasma levels of estradiol, 17-hydroxyprogesterone, and androstenedione in ferrets with adrenocortical disease (ACD) when administered at doses ranging from 3 to 4.41 mg/kg per implant.³ Deslorelin (4.7 mg/implant per animal) suppresses ovulation and estrus in cats.⁴ Formulations containing deslorelin have been used in the management of ACD in ferrets and ovulation regulation and artificial insemination in horses.

References

- 1. Nederpelt, I., Georgi, V., Schiele, F., et al. Characterization of 12 GnRH peptide agonists a kinetic perspective. Br. J. Pharmacol. 173(1), 128-141 (2016).
- 2. Junaidi, A., Williamson, P.E., Martin, G.B., et al. Dose-response studies for pituitary and testicular function in male dogs treated with the GnRH superagonist, deslorelin. Reprod. Domest. Anim. 44(5), 725-734 (2009).
- 3. Wagner, R.A., Piché, C.A., Jöchle, W., et al. Clinical and endocrine responses to treatment with deslorelin acetate implants in ferrets with adrenocortical disease. Am. J. Vet. Res. 66(5), 910-914 (2005).
- 4. Ackermann, C.L., Volpato, R., Destro, F.C., et al. Ovarian activity reversibility after the use of deslorelin acetate as a short-term contraceptive in domestic queens. Theriogenology 78(4), 817-822 (2012).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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