
Product Data Sheet

Product Name: Nafarelin
 Cat. No.: GC33080

Chemical Properties

Cas. No. 76932-56-4

SMILES {Glp}-His-Trp-Ser-Tyr-{2-Naph-Ala}-Leu-Arg-Pro-Gly-NH2

Formula C₆₆H₈₃N₁₇O₁₃ M.Wt 1322.47

Solubility >15.67 mg/mL in DMSO; >51.8 mg/mL in H₂O Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Nafarelin is an agonist of gonadotropin-releasing hormone (GNRH).^{1,2,3} It is a long-acting agent that, after an initial increase in sex hormone levels, decreases the level of circulating gonadotropins and sex hormones. *In vivo*, nafarelin (0.5-2.0 µg/kg, s.c.) reduces plasma levels of luteinizing hormone and testosterone as well as testicular volume, sperm count, sperm motility, and duration of ejaculation in male dogs.¹ Nafarelin (32 µg/animal per day) inhibits estrus in female beagle dogs.² It also reduces the volume of endometrial tissue in a rat model of endometriosis.³ Formulations containing nafarelin have been used in the treatment of endometriosis and central precocious puberty.

1. Vickery, B.H., McRae, G.I., Briones, W.V., et al. Dose-response studies on male reproductive parameters in dogs with nafarelin acetate, a potent LHRH agonist. *Androl.* 6(1)53-60(1985) 2. McRae, G.I., Roberts, B.B., Worden, A.C., et al. Long-term reversible suppression of oestrus in bitches with nafarelin acetate, a potent LHRH agonist. *Reprod. Fertil.* 74(2)389-397(1985) 3. Mizutani, T., Sakata, M., and Terakawa, N. Effect of gonadotropin-releasing hormone agonists, nafarelin, buserelin, and

Caution: Product has not been fully validated for medical applications. For research use only.

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leuprolide, on experimentally induced endometriosis in the ratInt. J. Fertil. Menopausal
Stud.40(2)106-111(1995)

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