Nafarelin (acetate)
Item No. 24070

CAS Registry No.: 76932-60-0
Formal Name: 6-[3-(2-naphthalenyl)-D-alanine]-luteinizing hormone-releasing factor (swine) acetate
MF: C_{66}H_{83}N_{17}O_{13} • XC_{2}H_{4}O_{2}
FW: 1,322.5
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Nafarelin (acetate) is supplied as a solid. A stock solution may be made by dissolving the nafarelin (acetate) in the solvent of choice, which should be purged with an inert gas. Nafarelin (acetate) is slightly soluble in DMSO and methanol. Nafarelin (acetate) is also slightly soluble in water.

Description

Nafarelin is an agonist of gonadotropin-releasing hormone (GnRH).\(^1\-\(^3\)\) 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 \(\mu\)g/kg, s.c.) reduces plasma levels of luteinizing hormone and testosterone (Item Nos. 15645 | ISO60154) as well as testicular volume, sperm count, sperm motility, and duration of ejaculation in male dogs.\(^1\) Nafarelin (32 \(\mu\)g/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.

References