

Leuprolide Acetate

Catalog No: tcsc1434



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

74381-53-6

Formula:

$C_{61}H_{88}N_{16}O_{14}$

Pathway:

GPCR/G Protein

Target:

GNRH Receptor

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 43.4 mg/mL (34.19 mM); H₂O : ≥ 66.66 mg/mL (52.51 mM)

Alternative Names:

Leuprorelin acetate

Observed Molecular Weight:

1269.45

Product Description

Leuprolide acetate (Leuprorelin) is a GnRH analog; leuprolide acetate acts as an agonist at pituitary GnRH receptors.

IC50 Value:

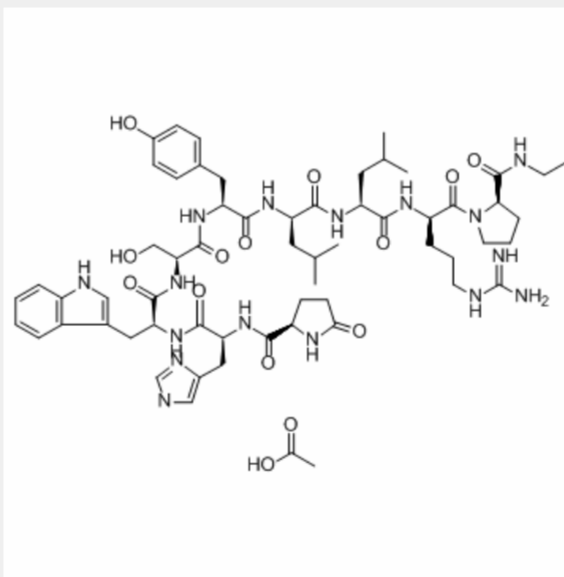
Target: GnRH receptor

By interrupting the normal pulsatile stimulation of, and thus desensitizing, the GnRH receptors, it indirectly downregulates the secretion of gonadotropins luteinizing hormone (LH) and follicle-stimulating hormone (FSH), leading to hypogonadism and thus a dramatic reduction in estradiol and testosterone levels in both sexes.

in vitro: The number of DNA 3'-end-labeled cells/cm² in leiomyomas of control patients and in leiomyomas at the 2nd, 8th, 12th, and 16th weeks of Leuprolide Acetate treatment were at low levels [1]. Testosterone, estradiol and progesterone were also reduced by LA, even though this reduction occurred for progesterone only at the highest LA dosage (10⁻⁶M; 606.0±114.3 ng/ml versus 1524.0±246.5 ng/ml; p=0.02) [2].

in vivo: Leuprolide acetate treatment decreases the severity of clinical signs of locomotion, induces a significantly greater body weight gain, increases the MBP and NFs expression, axonal area and cell infiltration in EAE animals [3]. Leuprolide (200 and 300 microg kg⁻¹ s.c.) per se showed anti-compulsive effect, causing statistically significant inhibition of marble-burying behavior of mice [4].

Clinical trial: Neoadjuvant Abiraterone Acetate Plus Leuprolide Acetate in Men With Localized High Risk Prostate Cancer . Phase 2



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!