

# 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 :  $\geq 43.4$  mg/mL (34.19 mM); H<sub>2</sub>O :  $\geq 66.66$  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:

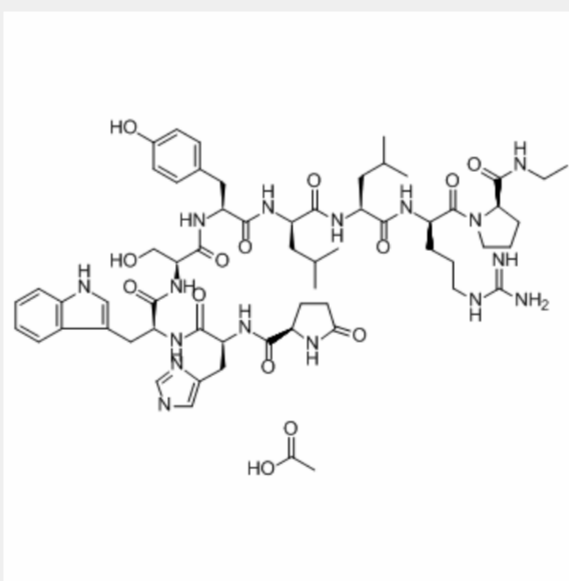
Target: GnRH receptor

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/cm<sup>2</sup> 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<sup>-6</sup>M; 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<sup>-1</sup> 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!