
Product Data Sheet

Product Name: Leuprolide Acetate
Cat. No.: GC10076

Chemical Properties

Cas. No. 74381-53-6

Chemical Name Leuprorelin acetate;Lupron

SMILES CCNC(=O)C1CCCN1C(=O)C(CCCN=C(N)N)NC(=O)C(CC(C)C)NC(=O)C(CC(C)C)NC(=O)C(CC2=CC=C(C=C2)O)NC(=O)C(CO)NC(=O)C

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

Solubility ≥ 126.9 mg/mL in DMSO, ≥ 31.4 mg/mL in EtOH with gentle warming, ≥ 102 mg/mL in Water with gentle warming

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

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

Structure

Background

Description: IC50 Value: N/A Leuprorelin (INN) or leuprolide acetate (USAN) is a GnRH analog. leuprolide acetate acts as an agonist at pituitary GnRH receptors. 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(-6)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(-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

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

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