



LKT Laboratories, Inc.

Leuprolide Acetate

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID L1881

CAS No. 74381-53-6

Chemical Name

Synonym Leuporelin, des-Gly10-[D-Leu6]-LH-RH ethylamide

Formula $C_{59}H_{84}N_{16}O_{12} \cdot C_2H_4O_2$

Formula Wt. 1269.47

Melting Point

Purity $\geq 98\%$

Solubility Slightly soluble in water.
Soluble in DMSO (>100 mg/mL), methanol, ethanol (0.25 mg/), DMF.

Store Temp -20°C

Ship Temp Ambient

Description Leuprolide (leuporelin) is a peptide analog of gonadotropin-releasing hormone (GnRH) that binds and activates the GnRH1 receptor. Leuporelin modulates fertility by stimulating release of reproductive hormones. Leuporelin also prevents stress-induced immunosuppression in animal models. Additionally, leuporelin exhibits anticancer activity, inhibiting proliferation of prostate cancer cells in vitro. Leuporelin also inhibits proliferation of endometrial cancer cells by suppressing expression of human telomerase reverse transcriptase (hTERT). In endometrial cells, leuporelin induces apoptosis by increasing levels of Bax and FasL and decreasing levels of Bcl-2. Leuporelin also exhibits anti-angiogenic activity, decreasing production of VEGF-A and IL-1B in endothelial cells.

p-Pro-His-Trp-Ser-Tyr-D-Leu-Leu-Arg-Pro-NHEt

Bulk quantities available upon request

| Product ID | Size |
|------------|------|
| L1881 | 1 mg |
| L1881 | 5 mg |

References Ko YH, Ha YR, Kim JW, et al. Silencing of the GnRH type 1 receptor blocks the antiproliferative effect of the GnRH agonist, leuprolide, on the androgen-independent prostate cancer cell line DU145. J Int Med Res. 2011;39(3):729-39. PMID: 21819703.

Tesone M, Bilotas M, Barañao RI, et al. The role of GnRH analogues in endometriosis-associated apoptosis and angiogenesis. Gynecol Obstet Invest. 2008;66 Suppl 1:10-8. PMID: 18936547.

Umathe SN, Dixit PV, Wanjari MM, et al. Leuprolide--a GnRH agonist--prevents restraint stress-induced immunosuppression via sex steroid-independent peripheral mechanism in mice. Int Immunopharmacol. 2008 Jan;8(1):71-9. PMID: 18068102.

Nagai N, Oshita T, Mukai K, et al. GnRH agonist inhibits human telomerase reverse transcriptase mRNA expression in endometrial cancer cells. Int J Mol Med. 2002 Nov;10(5):593-7. PMID: 12373298.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.