

Name	Leuprorelin Acetate
Cat #	PP-1460
Size	100 mg or bulk custom packages
CAS#	53714-56-0
Mol. Mass	1209.4
Formula	C ₅₉ H ₈₄ N ₁₆ O ₁₂
Sequence	Pyr-His-Trp-Ser-Tyr-D-Leu-Leu-Arg-Pro-NHEt
Purity	>95%
Appearance	White to off-white powder
	This peptide is for in vitro research use only and not intended as a drug for human or animal use.

Leuprorelin (INN) or leuprolide acetate (USAN) is a GnRH analog. Proper Sequence: Pyr-His-Trp-Ser-Tyr-D-Leu-Leu-Arg-Pro-NHEt (Pyr = L-Pyroglytanyl). Leuprolide acts as an agonist at pituitary GnRH receptors. By interrupting the normal pulsatile stimulation and the desensitization of the GnRH receptors; it indirectly down regulates 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.

An LH-RH (GnRH) analog, leuprolide may be used in the treatment of hormone-responsive cancers such as prostate cancer or breast cancer, estrogen-dependent conditions (such as endometriosis or uterine fibroids), to treat precocious puberty, and to control ovarian stimulation in In Vitro Fertilization (IVF). It is considered a possible treatment for paraphilias. Leuprolide has been tested as a treatment for reducing sexual urges in pedophiles and other cases of paraphilia. High doses are sometimes used to chemically castrate sex offenders. Leuprolide is also under investigation for possible use in the treatment of mild to moderate Alzheimer's disease.

References: Crosignani PG (2006) Human Reproduction 21, 248-256; Saleh F (2004) *J Forensic Sci* **49** (6): 1343–8; Doraiswamy PM (2006). *Expert Opin Pharmacother* **7** (1): 1–10