

Product Name : Leuprorelin

Synonyms : Leuprolide

**Cat No.** : M19810

**CAS Number** : 53714-56-0

Molecular Formula : C59H84N16O12

Formula Weight : 1209.4

Chemical Name (S)-N-ethyl-1-(((S)-5-oxopyrrolidine-2-carbonyl)-L-histidyl-L-tryptophyl-L-seryl-L-tyrosyl-D-leucyl-L-leucyl-L-arginyl)pyrrolidine-

2-carboxamide

Leuprolide is an agonist at pituitary GnRH receptors. GnRH receptor Leuprorelin is a gonadotrophin-releasing hormone (GnRH) analogue used to treat a wide range of sex hormone-related disorders including advanced prostatic cancer endometriosis and precocious puberty. Leuprorelin acts primarily on the anterior pituitary inducing a transient early rise in gonadotrophin release. With continued use Leuprorelin causes pituitary desensitisation and/or down-regulation leading to suppressed circulating levels of gonadotrophins and sex hormones. By interrupting the pormal pulsatile stimulation of and

suppressed circulating levels of gonadotrophins and sex hormones. 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.

Pathway : Others

Description

**SMILES** 

Target : Other Targets

Receptor : GNRHR

**Solubility** : DMSO:10 mM;Water:1mg/mL

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(Cc1ccc(O)cc1)NC(=O)[C@H](CO)NC(=O)[C@H](Cc1c[nH]c2ccccc12)NC(=O)[C@H](Cc1cnc[nH]1)NC(=O)

[C@@H]1CCC(=O)N1

**Storage** : (-20°C)

Stability : ≥ 2 years

Reference :

1.Plosker GL Leuprorelin. A review of its pharmacology and therapeutic use in prostatic cancer endometriosis and other sex hormone-related disorders. Drugs.1994 Dec; 48(6):930-967.