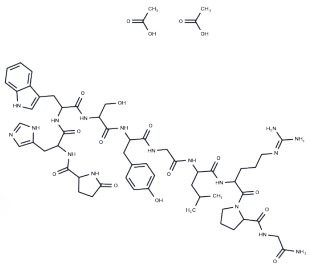
Data Sheet (Cat.No.T5015)

TargetMol

Gonadorelin Acetate (33515-09-2 free base)

Chemical Properties



CAS No. : 71447-49-9

Formula: C59H83N17O17

Molecular Weight: 1302.39

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Gonadorelin Acetate (33515-09-2 free base) (Luteinizing Hormone Releasing Hormone (LH-RH)) is hypothalamic neuropeptide which plays a key role in the control of reproductive functions.
Targets(IC50)	Reductase
In vitro	Luteinizing Hormone Releasing Hormone (LH-RH), also called gonadotropin-releasing hormone (GnRH), is the primary link between the brain, the pituitary and gonadal function, and has a key role in vertebrate reproduction. The endocrine actions of Luteinizing Hormone Releasing Hormone (LH-RH) and its analogs are mediated by high-affinity membrane receptors for LHRH on pituitary gonadotrophs. LHRH is expressed, together with its receptors,in hormonerelated tumors such as prostate cancer,to act as a local autocrine/paracrine growth inhibitory factor. In prostate cancer cells,the LHRH receptor is coupled to the Gi-cAMP pathway to inhibit cell proliferation.
In vivo	Luteinizing Hormone Releasing Hormone treatment advances the timing of vaginal opening by 5 days, which is used as an initial indicator for the time of puberty.
Animal Research	Rat:Immature female Sprague-Dawley rats receive either 50 ng Luteinizing Hormone Releasing Hormone (LH-RH)/kg BW or 20 mg NMA/kg BW in a 10% dextrose, 0.9% NaCl solution, while controls receive only vehicle. After completion of the treatment, rats are examined daily for vaginal opening.

Solubility Information

Solubility	H2O: 10 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7678 mL	3.8391 mL	7.6782 mL
5 mM	0.1536 mL	0.7678 mL	1.5356 mL
10 mM	0.0768 mL	0.3839 mL	0.7678 mL
50 mM	0.0154 mL	0.0768 mL	0.1536 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Moretti RM, et al. Inhibitory activity of luteinizing hormone-releasing hormone on tumor growth and progression. Endocr Relat Cancer. 2003 Jun;10(2):161-7.
Urbanski HF, et al. Activation of luteinizing hormone-releasing hormone release advances the onset of femalepuberty. Neuroendocrinology. 1987 Sep;46(3):273-6.
Engel JB, et al. Drug Insight: clinical use of agonists and antagonists of luteinizing-hormone-releasing hormone. Nat Clin Pract Endocrinol Metab. 2007 Feb;3(2):157-67.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481