

PRODUCT INFORMATION



Cetrorelix (acetate)

Item No. 23910

CAS Registry No.: 145672-81-7

Formal Name: N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-D-phenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-L-tyrosyl-N⁵-(aminocarbonyl)-D-ornithyl-L-leucyl-L-arginyl-L-prolyl-D-alaninamide, acetate

Synonym: SB-75

MF: C₇₀H₉₂ClN₁₇O₁₄ • XC₂H₄O₂

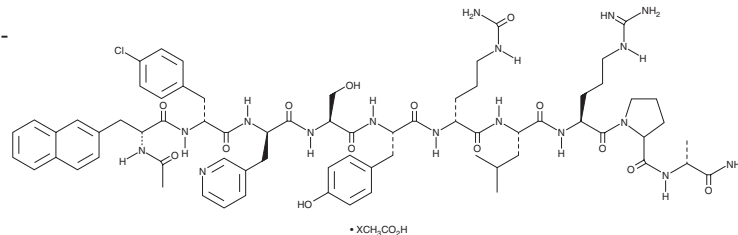
FW: 1,431.1

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cetrorelix (acetate) is supplied as a solid. A stock solution may be made by dissolving the cetrorelix (acetate) in the solvent of choice, which should be purged with an inert gas. Cetrorelix (acetate) is slightly soluble in DMSO and methanol.

Description

Cetrorelix is a synthetic peptide antagonist of the gonadotropin-releasing hormone receptor (GnRHR) with a K_d value of 0.2 nM for radioligand binding to murine LTK- cells expressing human GnRHR.¹ It inhibits the activation of hGnRHR and a downstream luciferase reporter gene in murine LTK- cells by the GnRHR agonist [D-Trp⁶]GnRH (IC₅₀ = 1.2 nM). *In vivo*, cetrorelix (60 µg per day) reduces tumor volume to 35% of control and decreases serum luteinizing hormone levels by 50% in a human epithelial ovarian cancer mouse xenograft model.² Cetrorelix (0.5 mg/kg) protects the primordial follicles (PMF) in mouse ovaries from damage induced by cyclophosphamide (Item No. 13849) with 65% to 86% PMF survival compared to 46% PMF survival with a saline control.³ Formulations containing cetrorelix have been used to prevent ovulation during *in vitro* fertilization.

References

1. Beckers, T., Reiländer, H., and Hilgard, P. Characterization of gonadotropin-releasing hormone analogs based on a sensitive cellular luciferase reporter gene assay. *Anal. Biochem.* **251**(1), 17-23 (1997).
2. Yano, T., Pinski, J., Halmos, G., et al. Inhibition of growth of OV-1063 human epithelial ovarian cancer xenografts in nude mice by treatment with luteinizing hormone-releasing hormone antagonist SB-75. *Proc. Nat. Acad. Sci. USA* **91**(15), 7090-7094 (1994).
3. Meirow, D., Assad, G., Dor, J., et al. The GnRH antagonist cetrorelix reduces cyclophosphamide-induced ovarian follicular destruction in mice. *Hum. Reprod.* **19**(6), 1294-1299 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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