

PRODUCT INFORMATION



Alarelin (acetate)

Item No. 30993

CAS Registry No.: 79561-22-1

Formal Name: 6-D-alanine-9-(N-ethyl-L-prolinamide)-1-9-luteinizing hormone-releasing factor (swine), diacetate

Synonyms: pGlu-HWSYALRP-NHEt, [D-Ala⁶, des-Gly¹⁰]GnRH-ethylamide, des-Gly GnRH

MF: C₅₆H₇₈N₁₆O₁₂ • 2C₂H₄O₂
FW: 1,287.4

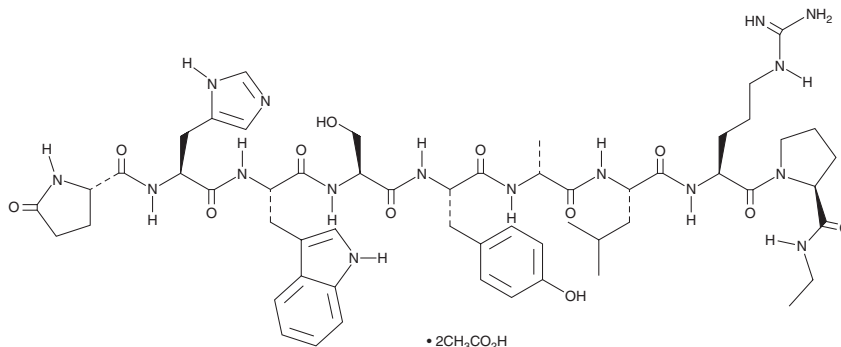
Purity: ≥98%

UV/Vis.: λ_{max}: 221 nm

Supplied as: A crystalline 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

Alarelin (acetate) is supplied as a crystalline solid. A stock solution may be made by dissolving the alarelin (acetate) in the solvent of choice, which should be purged with an inert gas. Alarelin (acetate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of alarelin (acetate) in these solvents is approximately 5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of alarelin (acetate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of alarelin (acetate) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Alarelin is a peptide agonist of gonadotropin-releasing hormone (GnRH).¹ It binds to the GnRH receptor (GnRHR) with a K_d value of 0.2 nM. Alarelin (6 ng, i.c.v.) decreases the expression of *GnRH* in the preoptic area and *GnRHR* in the posterior mediobasal hypothalamus (pMBH) of ovariectomized estradiol-treated rats, indicating an ultrashort negative feedback loop on *GnRH* and *GnRHR* gene expression.² It induces desensitization in the pituitary and decreases serum estradiol levels and ovarian and uterine weight in neonatal and adult female rats.³ Alarelin reduces tumor growth in an HEC-1-B human endometrial carcinoma mouse xenograft model when administered at doses of 20, 40, and 80 µg/kg.⁴

References

1. Niderpelt, I., Georgi, V., Schiele, F., *et al.* *Br. J. Pharmacol.* **173**(1), 128-141 (2016).
2. Han, Y.-G., Kang, S.S., Seong, J.Y., *et al.* *J. Neuroendocrinol.* **11**(3), 195-201 (1999).
3. Trimiño, E., Pinilla, L., and Aguilar, E. *Acta Endocrinol. (Copenh.)* **129**(3), 251-259 (1993).
4. Xiaoying, X. and Sanyuan, Z. *Zhonghua Linchuang Yishi Zazhi* **9**(7), 63-66 (2015).

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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