

Certificate of Analysis

Print Date: Aug 16th 2017

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Product Name: Goserelin acetate Catalog No.: 3592 Batch No.: 1

CAS Number: 145781-92-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{59}H_{84}N_{18}O_{14}$ Batch Molecular Weight: 1269.42

Physical Appearance: White lyophilised solid

Net Peptide Content: 90%
Counter Ion: Acetate

Solubility: Soluble in water
Storage: Desiccate at -20°C

Peptide Sequence: Pyr-His-Trp-Ser-Tyr-D-Ser(t-Bu)-Leu-Arg-

Pro-azagly-NH₂

2. ANALYTICAL DATA

HPLC: Shows 99.0% purity **Mass Spectrum:** Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys		
Arg	1.00	0.90	Met		
Asx			Phe		
Cys			Pro	1.00	1.00
Glx	1.00	1.00	Ser	2.00	1.80
Gly			Thr		
His	1.00	1.00	Trp		
lle			Tyr	1.00	1.00
Leu	1.00	1.00	Val		



Product Information

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Description:

Synthetic gonadotropin-releasing hormone (GnRH) analog that behaves as an agonist at the GnRH receptors. Stimulates gonadotropin and sex hormone release in the short term, and causes suppression with continued administration. Displays antiproliferative activity in breast, prostate and endometrial cancers.

Physical and Chemical Properties:

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Physical Appearance: White lyophilised solid

Peptide Sequence:

Pyr-His-Trp-Ser-Tyr-D-Ser(t-Bu)-Leu-Arg-Pro-azagly-NH₂ Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble in water

Net Peptide Content: 90% (Remaining weight made up of

counterions and residual water).

Counter Ion: Acetate

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 μ m filter to remove potential bacterial contamination whenever possible.

References:

Chatzaki et al (1996) The expression of gonadotropin-releasing hormone and its receptor in endometrial cancer, and its relevance as an autocrine growth factor. Cancer Res. 56 2059. PMID: 8616851.

Dondi *et al* (1994) Antiproliferative effects of luteinizing hormone-releasing hormone (LHRH) agonists on human androgen-independent prostate cancer cell line DU 145: evidence for an autocrine-inhibitory LHRH loop. Cancer Res. *54* 4091. PMID: 8033142.

Chrisp and Goa (1991) Goserelin. A review of its pharmacodynamic and pharmacokinetic properties, and clinical use in sex-hormone-related conditions. Drugs 2 254.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use