[D-Phe2,D-Ala6]-LH-RH

Cat. No.:	HY-P3664
CAS No.:	54784-44-0
Molecular Formula:	$C_{59}H_{79}N_{15}O_{13}$
Molecular Weight:	1206.35
Sequence Shortening:	{Glp}-{d-Phe}-WSY-{d-Ala}-LRPG-NH2
Target:	GnRH Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

[D-Phe2,D-Ala6]-LH-RH is a potent LH-RH antagonist. [D-Phe2,D-Ala6]-LH-RH shows anti-LH/FSH-RH and antiovulatory activities[1].

In Vivo

[D-Phe2,D-Ala6]-LH-RH inhibits the LH and FSH release induced by LH-RH in immature male rats[1].
[D-Phe2,D-Ala6]-LH-RH (1 mg/rat, SC) shows marked antiovulatory and contraceptive activity[2].[D-Phe2,D-Ala6]-LH-RH (0.625, 1.25, 2.5 mg/kg; s.c.; single dose; sacrificed 30 minutes) results a dose-dependent increase in stalk-median eminence (SME)-LHRH activity and decreases plasma LHRH activity as well in rats with hypophysectomized (hypox) at 25 days old[3].
[D-Phe2,D-Ala6]-LH-RH (25 mg/kg; s.c.; single dsoe) is effective in blocking the ovulation normally induced by LRH alone[4].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult female Sprague-Dawley rats (200-250 g)[2]
Dosage:	1 mg/rat
Administration:	SC injections, from 12:00 to 14:30 hr on the day of proestrus
Result:	Showed marked antiovulatory and contraceptive activity, with 96% inhibition of ovulation.

REFERENCES

[1]. Vilchez-Martinez JA, et al. Comparison of the anti-LH/FSH-RH and anti-ovulatory activities of (D-Phe2, D-Leu6)-LH-RH and (D-Phe2, D-Ala6)-LH-RH. Endocr Res Commun. 1976;3(3-4):231-41.

[2]. Beattie CW, et al. Luteinizing hormone-releasing hormone. Antiovulatory activity of analogs substituted in positions 2 and 6. J Med Chem. 1975 Dec;18(12):1247-50.

[3]. Corbin A, et al. Effect of luteinizing hormone releasing hormone (LHRH) and an LHRH antagonist of hypothalamic and plasma LHRH of hypophysectomized rats. Endocrinology. 1976 Jan;98(1):247-50.

[4]. Corbin A, et al. Ihibition of the pre-ovulatory proestrous gonadotropin surge, ovulation and pregnancy with a peptide analogue of luteinizing hormone releasing hormone. Endocr Res Commun. 1975;2(1):1-23.

Caution: Product has not been fully validated for medical applications. For research use only.

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