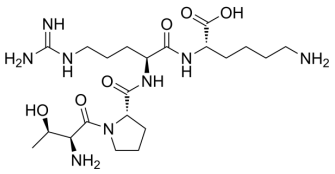
Kentsin

Cat. No.:	HY-123492
CAS No.:	56767-30-7
Molecular Formula:	$C_{21}H_{40}N_8O_6$
Molecular Weight:	500.59
Sequence Shortening:	TPRK
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Kentsin, a contraceptive tetrapeptide, is originally extracted from hamster embryos. Kentsin prevents the maturation of Graafian follicles and consequently inhibits ovulation. Kentsin has opiate properties on gastrointestinal motility[1][3][5].
In Vitro	Kentsin (100 μg/mL, 18 h) increases endogenous xenotropic virus expression in K-Balb 19a/h cells transformed with Kirsten sarcoma virus[2]. Kentsin (30 μM) does not inhibit electrically stimulated contractions of the guinea pig ileum (GPI) or mouse vas deferens (MVD)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Kentsin (0-100 μg, i.c.v. or intrathecal administration) produces analgesia in both the hotplate and abdominal stretch tests[1]. Kentsin (20 and 100 ng/kg, i.c.v.) inhibits the antral motility index and disrupts the jejunal migrating motor complex in fasted dogs[3]. Kentsin (4.0 μg/kg, i.c.v. 2 hours after the beginning of a meal) restores the “fasted” (the migrating myoelectric complex of intestinal motility), and can be blocked by previous Naloxone (400 μg/kg, i.c.v.)[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Fasted dogs[3]
Dosage:	20 and 100 ng/kg
Administration:	Intracerebroventricular injection (i.c.v.)
Result:	Inhibited the antral motility index by 51.2 and 76.1%. Disrupted the jejunal migrating motor complex for 2 and 4 h respectively.

REFERENCES

[1]. Fox DA, et al. Kentsin: tetrapeptide from hamster embryos produces naloxone-sensitive effects without binding to opioid receptors. Peptides. 1987 Jul-Aug;8(4):613-8.

[2]. Suk WA, et al. Increased expression of endogenous xenotropic murine retrovirus by treatment with the tetrapeptides, tuftsin and kentsin. J Gen Virol. 1981 Jan;52(Pt

1):189-94.

[3]. Bueno L, et al. Central opioid-like influence of a tetrapeptide from hamster embryo (kentsin) on gastrointestinal motility in dogs. Eur J Pharmacol. 1985 Aug 7;114(1):67-70.

[4]. Buéno L, et al. A tetrapeptide isolated from hamster embryo with central opiate properties on gastrointestinal motility but not on pain perception. Life Sci. 1986 Jul 14;39(2):141-6.

[5]. Wieczorek Z, et al. The immunomodulatory activity of tetra- and tripeptides of tuftsin-kentsin group. Peptides. 1994;15(2):215-21.

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