Product Data Sheet

LPLRF-NH2

Cat. No.: HY-P3593

CAS No.: 88280-21-1

Molecular Formula: $C_{32}H_{33}N_{9}O_{5}$ Molecular Weight: 643.82

Sequence Shortening: LPLRF-NH2

Target: Others
Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	LPLRF-NH2 is a member of RFamide peptide with anorexigenic effect. LPLRF-NH2 increases arterial blood pressure and modulates the electrical activity of brainstem neurons $^{[1][2][3]}$.	
In Vitro	YMRF-NH2 (0.1 nM-1 μ M) inhibits Forskolin-induced production of cAMP in CHO cells ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	LPLRF-NH2 (3-15 nmol, ICV) shows anorexigenic effect in chicks $^{[1]}$. LPLRF-NH2 (25-50 nM/kg, 150 μ L, i.v.) increases arterial blood pressure in rats $^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Chicks ^[1]
	Dosage:	3.0, 7.0 or 15 nmol
	Administration:	Intracerebroventrical injection (ICV) injection
	Result:	Decreased food intake. Increased number of c-Fos reactive cells in the paraventricular nucleus.

REFERENCES

[1]. Scheel A, et al. LPLRFamide exerts short-term anorexigenic effects that coincide with magnocellular division of the hypothalamic paraventricular nucleus activation. Gen Comp Endocrinol. 2017 May 15;246:116-119.

[2]. Barnard CS, et al. Increases in arterial blood pressure in the rat in response to a new vertebrate neuropeptide, LPLRFamide, and a related molluscan peptide, FMRFamide. Regul Pept. 1984 Apr;8(3):209-15.

[3]. Chartrel N, et al. Structure and functions of the novel hypothalamic RFamide neuropeptides R-RFa and 26RFa in vertebrates. Peptides. 2006 May;27(5):1110-20.

 $[4]. \ Hinuma\ S, et\ al.\ New\ neuropeptides\ containing\ carboxy-terminal\ RFamide\ and\ their\ receptor\ in\ mammals.\ Nat\ Cell\ Biol.\ 2000\ Oct; 2(10):703-8.$

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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Page 2 of 2 www.MedChemExpress.com