RFRP-3(human) TFA

Cat. No.:	HY-P1250A
Molecular Formula:	$C_{47}H_{73}F_3N_{14}O_{12}$
Molecular Weight:	1083.16
Sequence Shortening:	VPNLPQRF-NH2
Target:	Neuropeptide Y Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	RFRP-3 (Neuropeptide VF(124-131))(human) TFA, a human GnIH peptide homolog, is a potent inhibitor of gonadotropin secretion by inhibiting Ca^{2+} mobilization. RFRP-3(human) is a NPFF1 receptor agonist, it inhibits forskolin-induced production of cAMP with an IC_{50} of 0.7 nM[1].
In Vitro	RFRP-3 TFA efficiently inhibits forskolin-induced production of cAMP with an IC_{50} of 0.7 nM[1]. Scatchard-plot analysis shows that ^{125}I-labelled hRFRP-3 has a single class of high-affinity binding sites for the membrane fractions of CHO cells expressing rat OT7T022, the K_d value and the B_{max} values are 0.19 nM and 1.3 pM, respectively. RFRP-3 TFA specifically stimulate cells transfected with a new orphan 7TMR, OT7T022, it binds to OT7T022 as a specific ligand with high affinity (K_d= 0.19 nM)[1]. RFRP-3 (10^{-8} to 10^{-14}M) has no effect on LH and FSH levels alone, but when it combines with GnRH, LH and FSH secretion is significantly reduced by the combination[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Iain J Clarke, et al. Potent action of RFamide-related peptide-3 on pituitary gonadotropes indicative of a hypophysiotropic role in the negative regulation of gonadotropin secretion. Endocrinology

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

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