

Ac-RYYRIK-NH2

Cat. No.:	HY-P1318
CAS No.:	200959-48-4
Molecular Formula:	C ₄₄ H ₇₀ N ₁₄ O ₉
Molecular Weight:	939.11
Sequence Shortening:	Ac-RYYRIK-NH2
Target:	Opioid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description	Ac-RYYRIK-NH2 is a potent and partial agonist on ORL1 transfected in CHO cells ($K_d=1.5$ nM) and behaves as a endogenous ligand of ORL1. Ac-RYYRIK-NH2 is a specific antagonist for the activation of G protein and competitively antagonizes the stimulation of [³⁵ S]-GTPγS binding to G proteins by nociceptin/orphanin FQ (noc/OFQ) in membranes and sections of rat brain ^[1] .
IC ₅₀ & Target	Kd: 1.5 nM (ORL1 transfected in CHO cells) ^[1]
In Vivo	Ac-RYYRIK-NH2 (intracerebroventricularly (i.c.v.)) inhibits spontaneous locomotor activity in mice with an ID ₅₀ of 0.07 nmol. Co-administration of noc/OFQ and Ac-RYYRIK-NH2 lead to additive effects in Male Swiss mice ^[1] .

REFERENCES

- [1]. H Berger, et al. Antagonism by acetyl-RYYRIK-NH2 of G protein activation in rat brain preparations and of chronotropic effect on rat cardiomyocytes evoked by nociceptin/orphanin FQ. Br J Pharmacol. 1999 Feb;126(3):555-8.
- [2]. H Berger, et al. The nociceptin/orphanin FQ receptor ligand acetyl-RYYRIK-amide exhibits antagonistic and agonistic properties. Peptides. 2000 Jul;21(7):1131-9.
- [3]. C T Dooley, et al. Binding and in vitro activities of peptides with high affinity for the nociceptin/orphanin FQ receptor, ORL1. J Pharmacol Exp Ther. 1997 Nov;283(2):735-41.

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

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