Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Anamorelin

Catalog No: tcsc1036

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
249921-19-5

Formula:
$C_{31}H_{42}N_6O_3$

Pathway:
GPCR/G Protein

Target:
GHSR

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
RC-1291;ONO-7643

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Observed Molecular Weight:
546.7

Product Description

Anamorelin is a novel **ghrelin receptor** agonist with **EC_{50}** value of 0.74 nM in the FLIPR assay.

IC50 & Target: Ki: 0.7 nM (ghrelin receptor)[1]

EC50: 0.74 nM (ghrelin receptor)[1]

In Vitro: In the FLIPR assay, Anamorelin (ANAM) shows significant agonist activity on the ghrelin receptor, with EC_{50} value of 0.74 nM. No significant antagonist activity is observed with Anamorelin at concentrations of up to 1,000 nM. In the binding experiments, Anamorelin binds to the ghrelin receptor with a binding affinity constant (K_i) of 0.70 nM. In the competition assay with radiolabeled ibutamoren (^{35}S-MK-677; another ghrelin receptor agonist) Anamorelin (ANAM) is also found to bind with high affinity to the ghrelin receptor (IC_{50}=0.69 nM). In rat pituitary cells incubated with Anamorelin, there is a dose-dependent stimulatory effect on GH release and the potency (EC_{50}) is 1.5 nM. Anamorelin is screened for activity against a set of over 100 receptors, ion channels, transporters, and enzymes. Anamorelin demonstrates binding to the tachykinin neurokinin 2 (NK_2) site (IC_{50}=0.021 μM); however, a subsequent NK_2 functional assay demonstrates no functional activity[1].

In Vivo: In rats, Anamorelin (ANAM) at an oral dose of 3, 10, or 30 mg/kg once daily significantly increases both food intake and body weight from Day 2 to Day 7 of treatment compared with the vehicle control. The cumulative change in food intake and weight gain increases dose-dependently, and these changes are significant at all dose levels (P0-6h in rats[1].