



## **Anamorelin**

Catalog No: tcsc1036

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Size: 200mg
Size: 500mg
Specifications
CAS No: 249921-19-5
<b>Formula:</b> $C_{31}^{H}_{42}^{N}_{6}^{O}_{3}$
Pathway: GPCR/G Protein
Target: GHSR
Purity / Grade: >98%
Solubility: 10 mM in DMSO
Alternative Names: RC-1291;ONO-7643





## **Observed Molecular Weight:**

546.7

## **Product Description**

Anamorelin is a novel **ghrelin receptor** agonist with  $\mathbf{EC}_{50}$  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<sub>50</sub> 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 ( $IK_2$ ) site ( $IC_{50}$ =0.021 ILM); however, a subsequent  $ILM_2$  functional assay demonstrates no functional activity<sup>[1]</sup>.

*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<sup>[1]</sup>.

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