

RC-3095

Cat. No.:	HY-P0107
CAS No.:	138147-78-1
Molecular Formula:	C ₅₆ H ₇₉ N ₁₅ O ₉
Molecular Weight:	1106.32
Sequence:	{d-Tpi)-Gln-Trp-Ala-Val-Gly-His-Leu-Leu-NH ₂
Sequence Shortening:	{d-Tpi)-QWAVGHLL-NH ₂
Target:	Bombesin Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description	RC-3095 is a bombesin/gastrin releasing peptide receptor (GRPR) antagonist ^[1] . RC-3095 exerts protective effects by reducing gastric oxidative injury in the arthritic mice ^[2] .								
IC₅₀ & Target	Bombesin receptor; GRPR ^[1]								
In Vivo	<p>RC-3095 impairs aversive but not recognition memory in Wistar male rats^[1].</p> <p>RC-3095 (0.3 mg/kg or 1 mg/kg; S.C.) shows anti-inflammatory effects in 2 experimental models of arthritis, collagen-induced arthritis (CIA) and antigen-induced arthritis (AIA)^[2].</p> <p>Arthritic mice treated with RC-3095 show a significant reduction in the concentrations of IL-17, IL-1, and TNF, and showed a diminished expression of GRPR^[2].</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Male Balb/c wild-type mice (weighing 18-25 gm) with AIA model; Male DBA/1J inbred mice (weighing 18-25 gm) with CIA model^[2]</td> </tr> <tr> <td>Dosage:</td> <td>1 mg/kg for AIA studies; 0.3 mg/kg or 1 mg/kg for CIA studies</td> </tr> <tr> <td>Administration:</td> <td>Injected SC twice a day for a total of 2 or 10 days for AIA studies; Administered SC twice a day for 10 days after the onset of the disease for CIA studies</td> </tr> <tr> <td>Result:</td> <td>Reduced neutrophil migration, mechanical hypernociception, and proteoglycan loss in mice with AIA; Led to a significant reduction in arthritis clinical scores and the severity of disease in the CIA model.</td> </tr> </table>	Animal Model:	Male Balb/c wild-type mice (weighing 18-25 gm) with AIA model; Male DBA/1J inbred mice (weighing 18-25 gm) with CIA model ^[2]	Dosage:	1 mg/kg for AIA studies; 0.3 mg/kg or 1 mg/kg for CIA studies	Administration:	Injected SC twice a day for a total of 2 or 10 days for AIA studies; Administered SC twice a day for 10 days after the onset of the disease for CIA studies	Result:	Reduced neutrophil migration, mechanical hypernociception, and proteoglycan loss in mice with AIA; Led to a significant reduction in arthritis clinical scores and the severity of disease in the CIA model.
Animal Model:	Male Balb/c wild-type mice (weighing 18-25 gm) with AIA model; Male DBA/1J inbred mice (weighing 18-25 gm) with CIA model ^[2]								
Dosage:	1 mg/kg for AIA studies; 0.3 mg/kg or 1 mg/kg for CIA studies								
Administration:	Injected SC twice a day for a total of 2 or 10 days for AIA studies; Administered SC twice a day for 10 days after the onset of the disease for CIA studies								
Result:	Reduced neutrophil migration, mechanical hypernociception, and proteoglycan loss in mice with AIA; Led to a significant reduction in arthritis clinical scores and the severity of disease in the CIA model.								

REFERENCES

- [1]. Oliveira PG, et al. Protective effect of RC-3095, an antagonist of the gastrin-releasing peptide receptor, in experimental arthritis. Protective effect of RC-3095, an antagonist of the gastrin-releasing peptide receptor, in experimental arthritis. *Arthritis Rheum.* 2011 Oct;63(10):2956-65.
- [2]. Roesler R, et al. RC-3095, a bombesin/gastrin-releasing peptide receptor antagonist, impairs aversive but not recognition memory in rats. *Eur J*

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA