Data Sheet

Product Name:	Rat CGRP-(8-37)
Cat. No.:	CS-7927
CAS No.:	129121-73-9
Molecular Formula:	C138H224N42O41
Molecular Weight:	3127.51
Target:	CGRP Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Solubility:	H2O : 50 mg/mL (15.99 mM; Need ultrasonic)

VTHRLAGLLSRSGGVVKDNFVPTNVGSEAF-NH_2

BIOLOGICAL ACTIVITY:

Rat CGRP-(8-37) (VTHRLAGLLSRSGGVVKDNFVPTNVGSEAF) is a highly selective **CGRP receptor** antagonist. IC50 & Target: CGRP receptor[1] **In Vitro:** CGRP-(8-37) is a truncated version of calcitonin gene-related peptide (CGRP) that binds to the CGRP receptor with similar affinity but does not activate the receptor[1]. **In Vivo:** CGRP-(8-37) is effective in alleviating mechanical and thermal allodynia in a dose-dependent manner. The 50 nM dose is most efficacious for both forelimb and hindlimb responses. The period of efficacy is 10 min to onset for a duration of 20 min. Post-drug washout responses are not statistically significant compared to pre-drug responses[1] . Intrathecal administration of 5 nmol or 10 nmol of CGRP-(8-37), but not 1 nmol, induces a significant increase in hindpaw withdrawal latency. Intrathecal administration of CGRP-(8-37) not only reverses the SP-induced decrease in latency to both withdrawal responses but also mediates a significant increase in response latency compared to basal levels[2].

PROTOCOL (Extracted from published papers and Only for reference)

Animal Administration: [1]Rats: Adult male Sprague Dawley rats are given a spinal hemisection or a sham surgery at the T13 spinal segment. An externally accessible PE-10 intrathecal catheter that terminated at T13 is used for drug delivery. Animals are allowed to recover for 4 weeks at which time the hemisected animals displayed mechanical and thermal allodynia bilaterally, in both forelimbs and hindlimbs. CGRP-(8-37) is delivered just prior to a testing session in 1, 5, 10, or 50 nM doses in artificial cerebral spinal fluid in 10 mL volumes[1].

References:

[1]. Bennett AD, et al. Alleviation of mechanical and thermal allodynia by CGRP(8-37) in a rodent model of chroniccentral pain. Pain. 2000 May;86(1-2):163-75.

[2]. Yu LC, et al. The calcitonin gene-related peptide antagonist CGRP8-37 increases the latency to withdrawalresponses in rats. Brain Res. 1994 Aug 8;653(1-2):223-30.

CAIndexNames:

8-37-α-Calcitonin gene-related peptide (human reduced), 25-L-aspartic acid-35-L-glutamic acid-

SMILES:

[VTHRLAGLLSRSGGVVKDNFVPTNVGSEAF-NH2]

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

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