上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话：021-61312973　　传真：021-55068248
网址：www.shyuanye.com
邮箱：shyysw@sina.com

**产品名称：**

**ALA-CYS-ASP-THR-ALA-THR-CYS-VAL-THR-HIS-ARG-LEU-ALA-GLY-LEU-LEU-SER-ARG-SER-GLY-GLY-VAL-VAL-LYS-ASN-ASN-PHE-VAL-PRO-THR-ASN-VAL-**

**产品别名：Rat CGRP-(8-37)**

## 生物活性：

| | |
|---|---|
| **Description** | Rat CGRP-(8-37) (VTHRLAGLLSRSGGVVKDNFVPTNVGSEAF) is a highly selective CGRP receptor antagonist. |
| **$IC_{50}$ & 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]. |
| **Solvent&Solubility** | ***In Vitro:***<br>**$H_2O$ : 50 mg/mL (15.99 mM;** Need ultrasonic) |

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 0.3197 mL | 1.5987 mL | 3.1974 mL |
| 5 mM | 0.0639 mL | 0.3197 mL | 0.6395 mL |
| 10 mM | 0.0320 mL | 0.1599 mL | 0.3197 mL |

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

**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.

## 实验参考：

| | |
|---|---|
| **Animal Administration** | 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.<br>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.<br>[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. |