## ACTH 11-24

## Chemical Properties

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|---|---|
| CAS No.: | 4237-93-8 |
| Formula： | C77H134N24O16 |
| Molecular Weight： | 1652.04 |
| Appearance: | N/A |
| Storage： | 0-4℃ for short term (days to weeks), or -20℃ for long term (months). |

## Biological Description

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| Description | ACTH (11-24) is a fragment of adrenocorticotrophin, induces cortisol release. ACTH (11-24) has been identified as a competitive antagonist of ACTH (1-39) and ACTH (1-10) in isolated adrenal cells. |
| In vitro | ACTH (11-24) acts as an antagonist of adrenocorticotropic hormone receptor[1]. ACTH (11-24) induces cortisol secretion submaximally in freshly dispersed or cultured beef adrel cortical cells. The maximal cortisol release by ACTH (11-24) is enhanced by forskolin but inhibited by calcium channel blockers[2]. |
| In vivo | ACTH (11-24) blocks electroacupuncture (EA) anti-edema but not EA anti-hyperalgesia in rats[1]. |

## Solubility Information

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| Solubility | H2O: Soluble<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 0.605 mL | 3.027 mL | 6.053 mL |
| 5 mM | 0.121 mL | 0.605 mL | 1.211 mL |
| 10 mM | 0.061 mL | 0.303 mL | 0.605 mL |
| 50 mM | 0.012 mL | 0.061 mL | 0.121 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference
1. Li ZG, et al. Adrenocorticotropin(1-10) and -(11-24) promote adrenal steroidogenesis by different mechanisms. Endocrinology. 1989 Aug;125(2):592-6.
2. Li A, et al. Electroacupuncture activates corticotrophin-releasing hormone-containing neurons in the paraventricular nucleus of the hypothalammus to alleviate edema in a rat model of inflammation. BMC Complement Altern Med. 2008 May 12;8:20.