PRODUCT INFORMATION

ACTH (1-39) (trifluoroacetate salt)
Item No. 24257

Synonym: Adrenocorticotropin Hormone (1-39)  
MF: C_{207}H_{308}N_{56}O_{58}S • XCF_{3}COOH  
FW: 4,541.1  
Purity: ≥95%  
Supplied as: A lyophilized powder  
Storage: -20°C  
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ACTH (1-39) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the ACTH (1-39) (trifluoroacetate salt) in the solvent of choice. ACTH (1-39) (trifluoroacetate salt) is soluble in the organic solvent formic acid, which should be purged with an inert gas, at a concentration of approximately 1 mg/ml.

Description

ACTH (1-39) is a potent agonist of melanocortin receptor 2 (MC2R) with an EC_{50} value of 57 pM in HeLa cells expressing the mouse receptor.\(^1\) It induces accumulation of cAMP and release of corticosterone from rat adrenal cells in a concentration-dependent manner.\(^2\) ACTH (1-39) also protects neurons from death induced by staurosporine (Item No. 81590), glutamate, NMDA (Item No. 14581), AMPA (Item No. 14571), kainate, quinolinic acid (Item No. 14941), and reactive oxygen species when used at a concentration of 400 nM.\(^3\) Formulations containing ACTH (1-39) have been used in the treatment of systemic lupus erythematosus.

References