

PRODUCT INFORMATION



ACTH (18-39) (human)

Item No. 27274

CAS Registry No.: 53917-42-3

Synonyms: Adrenocorticotrophic Hormone (18-39),
Corticotropin-like Intermediate Lobe
Peptide, RPKVKVYPNGAEDESAAEAFPLEF

MF: $C_{112}H_{165}N_{27}O_{36}$

FW: 2,465.7

Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years

H—Arg—Pro—Val—Lys—Val—Tyr—Pro—Asn—Gly—Ala—Glu—

Asp—Glu—Ser—Ala—Glu—Ala—Phe—Pro—Leu—Glu—Phe—OH

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

Laboratory Procedures

ACTH (18-39) (human) is supplied as a solid. A stock solution may be made by dissolving the ACTH (18-39) (human) in the solvent of choice, which should be purged with an inert gas. ACTH (18-39) (human) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ACTH (18-39) (human) in these solvents is approximately 5 and 2.5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ACTH (18-39) (human) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of ACTH (18-39) (human) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Adrenocorticotrophic hormone (ACTH) (18-39) is a C-terminal peptide fragment of ACTH, a peptide hormone found in the brain that is involved in the biological stress response.¹ It is produced *via* processing of ACTH in the intermediate lobe of the pituitary gland.^{1,2} ACTH (18-39) increases cumulative food intake in fasted, but not fed, rats when administered intracerebroventricularly at a dose of 2.5 nmol/animal.²

References

1. Strand, F.L., Lee, S.J., Zuccarelli, L.A., *et al.* Non-corticotrophic ACTH peptides modulate nerve development and regeneration. *Rev. Neurosci.* **4(4)**, 321-363 (1993).
2. Al-Barazanji, K.A., Miller, J.E., Rice, S.Q.J., *et al.* C-terminal fragments of ACTH stimulate feeding in fasted rats. *Horm. Metab. Res.* **33(8)**, 480-485 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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