

ACTH (1-16), human

PRODUCT DESCRIPTION

ACTH (1-16), human is a 16-amino-acid A peptide related to the melanocortin system, derived from proopiomelanocortin (POMC) or its analogs. Melanocortins signal through MC1R-MC5R receptors to regulate pigmentation, inflammation, energy homeostasis, and sexual function. Used in dermatology, endocrinology, and neuroscience research for studying melanocortin receptor pharmacology and POMC processing.

PRODUCT SPECIFICATIONS

Catalog Number	BPT2265
CAS Number	5576-42-1
Molecular Weight	1937.2223 Da
Molecular Formula	C89H133N25O22S1
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

SYSMEHFRWGKPVGKK

Three-Letter Code:

H-Ser-Tyr-Ser-Met-Glu-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-Gly-Lys-Lys-OH

RESEARCH APPLICATIONS

Application	Receptor binding
Biomarker Target	Melanocortin Receptors (MC1-5R)
Research Area	Endocrinology
Sub-category	Melanocortin System & Pigmentation

STORAGE & HANDLING

Storage Temperature	-20 deg C
Form	Lyophilized
Stability	Lyophilized product stable for 24 months at -20 deg C
Reconstitution	Reconstitute in sterile water or appropriate buffer
After Reconstitution	Aliquot and store at -20 to -80 deg C
Avoid	Repeated freeze-thaw cycles

AVAILABLE SIZES

Size Options	1 mg, 10 mg
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Usage

Research use

QUALITY CONTROL

Purity Method

HPLC, Mass Spectrometry (MS)

Identity

Confirmed by ESI-MS or MALDI-TOF

Purity

Peak Area by HPLC $\geq 95\%$

Documentation

Certificate of Analysis (CoA) available upon request