# Ac-[Nle4,DPhe7] a-MSH (4-10), amide

## PRODUCT DESCRIPTION

Ac-[Nle4,DPhe7] a-MSH (4-10), amide is a 14-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

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|---|---|
| **Catalog Number** | BPT1468 |
| **Molecular Weight** | 1345.5907 Da |
| **Molecular Formula** | C61H88N18O13S2 |
| **Purity** | Peak Area by HPLC >=95% |
| **Form** | Lyophilized |
| **Source** | Synthetic (Chemical Synthesis, SPPS) |
| **Endotoxin** | N/A (Synthetic peptide) |

## AMINO ACID SEQUENCE

**One-Letter Code:**

```
Ac-CEHfRWCKPV-NH2
```

**Three-Letter Code:**

```
Ac-Cys-Glu-His-{D-Phe}-Arg-Trp-Cys-Lys-Pro-Val-NH2
```

## RESEARCH APPLICATIONS

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

## STORAGE & HANDLING

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|---|---|
| **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 |
| **Usage** | Research use |

## QUALITY CONTROL

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|---|---|
| **Purity Method** | HPLC, Mass Spectrometry (MS) |
| **Identity** | Confirmed by ESI-MS or MALDI-TOF |
| **Purity** | Peak Area by HPLC >=95% |
| **Documentation** | Certificate of Analysis (CoA) available upon request |