

[Tyr11]-Somatostatin-14

PRODUCT DESCRIPTION

[Tyr11]-Somatostatin-14 is a 35-amino-acid A peptide related to the somatostatin family, a cyclic peptide hormone that inhibits the secretion of growth hormone, insulin, glucagon, and other hormones through SSTR1-5 receptors. Somatostatin analogs are clinically used for treating acromegaly and neuroendocrine tumors. Used in endocrinology and oncology research for studying hormonal regulation, tumor growth inhibition, and receptor pharmacology.

PRODUCT SPECIFICATIONS

|                   |                                      |
|-------------------|--------------------------------------|
| Catalog Number    | BPT0744                              |
| CAS Number        | 59481-27-5                           |
| Molecular Weight  | 1653.8734 Da                         |
| Molecular Formula | C76H104N18O20S2                      |
| Purity            | Peak Area by HPLC >=95%              |
| Form              | Lyophilized                          |
| Source            | Synthetic (Chemical Synthesis, SPPS) |
| Endotoxin         | N/A (Synthetic peptide)              |

AMINO ACID SEQUENCE

One-Letter Code:

AGCKNFFWKTYTSC(Disulfidebridge:Cys3-Cys14)

Three-Letter Code:

H-Ala-Gly-Cys-Lys-Asn-Phe-Phe-Trp-Lys-Thr-Tyr-Thr-Ser-Cys-OH(Disulfidebridge:Cys3-Cys14)

RESEARCH APPLICATIONS

|                  |                                          |
|------------------|------------------------------------------|
| Application      | Receptor binding                         |
| Biomarker Target | Somatostatin Receptors (SSTR1-5)         |
| Research Area    | Endocrinology                            |
| Sub-category     | Somatostatin & Growth Hormone Regulation |

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 |
|--------------|-------------|

## 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