

[D-Tyr6, b-Ala11, beta-Phe13, Nle14]-Bombesin

PRODUCT DESCRIPTION

[D-Tyr6, b-Ala11, beta-Phe13, Nle14]-Bombesin is a 24-amino-acid A peptide related to the bombesin/gastrin-releasing peptide (GRP) family, which mediates diverse physiological functions including gastrointestinal motility, hormone secretion, cell proliferation, and satiety signaling. This peptide is used in oncology and gastrointestinal research to study GRP receptor (GRPR/BB2) signaling, tumor growth, and the development of targeted diagnostic and therapeutic agents.

PRODUCT SPECIFICATIONS

|                   |                                      |
|-------------------|--------------------------------------|
| Catalog Number    | BPT1827                              |
| Molecular Weight  | 1698.9185 Da                         |
| Molecular Formula | C81H115N23O18                        |
| Purity            | Peak Area by HPLC >=95%              |
| Form              | Lyophilized                          |
| Source            | Synthetic (Chemical Synthesis, SPPS) |
| Endotoxin         | N/A (Synthetic peptide)              |

AMINO ACID SEQUENCE

One-Letter Code:

{Pyr}QRLGyQWAV{beta-Ala}H{beta-Phe}{Nle}-NH2

Three-Letter Code:

H-{Pyr}-Gln-Arg-Leu-Gly-{D-Tyr}-Gln-Trp-Ala-Val-{Beta-Ala}-His-{beta-Phe}-{Nle}-NH2

RESEARCH APPLICATIONS

|                  |                                        |
|------------------|----------------------------------------|
| Application      | Receptor binding                       |
| Biomarker Target | Bombesin/GRP Receptors (BB1-3)         |
| Research Area    | Oncology                               |
| Sub-category     | Bombesin/GRP Signaling & Tumor Biology |

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 >=95%                              |
| Documentation | Certificate of Analysis (CoA) available upon request |