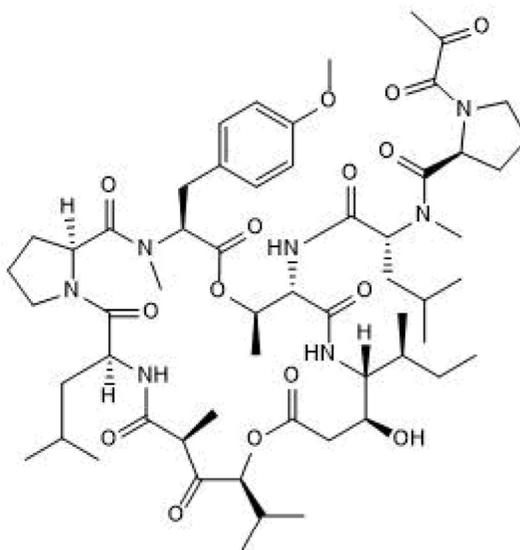


Product Name: Plitidepsin
CAS Number: 137219-37-5

Catalog No.: 7416 Batch No.: 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅₇H₈₇N₇O₁₅
Batch Molecular Weight: 1110.36
Physical Appearance: White solid
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Plitidepsin

Catalog No.: 7416

Batch No.: 1

CAS Number: 137219-37-5

Description:

Plitidepsin (dehydrodidemnin B) is a potent inhibitor of protein synthesis, blocker of G1 and G2 phases in cell cycle and potent antiviral against SARS-CoV-2 in hACE2-293T, Vero E6 cells and models of pneumocyte-like cells (IC₉₀ values are 0.88 nM, 1.76 nM and 3.14 nM, respectively). Plitidepsin also inhibits eukaryotic translation elongation factor 1 alpha 1 (eEF1A) (K_D = 80 nM). In vitro, it inhibits induction of ornithine decarboxylase (ODC), which is essential for cell transformation and proliferation. In vivo, daily administration of Plitidepsin on mice affected by Ehrlich carcinoma duplicated the animal life-span and decreased the to... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

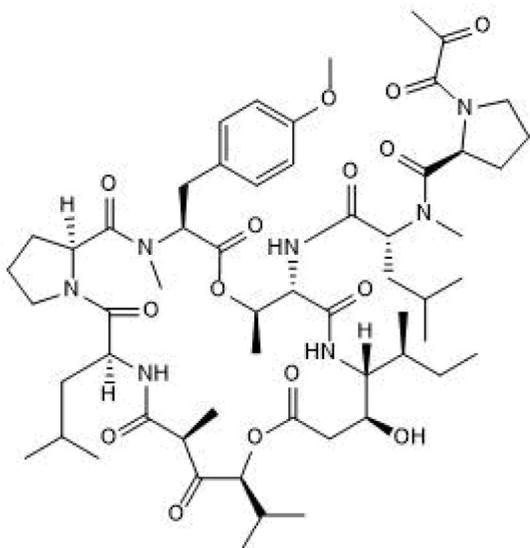
Batch Molecular Formula: C₅₇H₈₇N₇O₁₅

Batch Molecular Weight: 1110.36

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Reuschl et al (2021) Host-directed therapies against early-lineage SARS-CoV-2 retain efficacy against B.1.1.7 variant. bioRxiv. PMID: 33501437.

White et al (2021) Plitidepsin has potent preclinical efficacy against SARS-CoV-2 by targeting the host protein eEF1A. Science **371** 926. PMID: 33495306.

Losada et al (2016) Translation elongation factor eEF1A2 is a novel anticancer target for the marine natural product plitidepsin. Sci.Rep. **6**. PMID: 27713531.

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