

Product Name: Cerulenin

Catalog No.: 6702

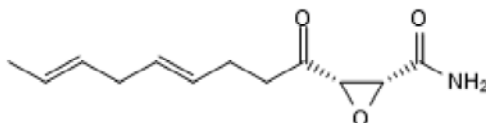
Batch No.: 1

CAS Number: 17397-89-6

IUPAC Name: (2*R*,3*S*)-3-[(4*E*,7*E*)-1-Oxo-4,7-nonadien-1-yl]-2-oxiranecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₂H₁₇NO₃
Batch Molecular Weight: 223.27
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.55	7.67	6.27
Found	64.74	7.73	6.38

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

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Description:

Irreversible fatty acid synthase inhibitor. Blocks proliferation of KRAS-driven lung cancer cells. Promotes apoptosis and inhibits necroptosis in cancer cells. Also inhibits protein palmitoylation and insulin uptake in rat adipocytes in vitro. Antibiotic.

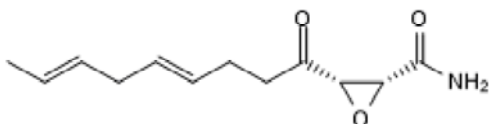
Physical and Chemical Properties:

Batch Molecular Formula: C₁₂H₁₇NO₃

Batch Molecular Weight: 223.27

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

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. Our standard recommendations are:

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:

Gouw *et al* (2017) Oncogene KRAS activates fatty acid synthase, resulting in specific ERK and lipid signatures associated with lung adenocarcinoma. *Proc.Natl.Acad.Sci.U.S.A.* **114** 4300. PMID: 28400509.

Parisi *et al* (2017) Very long chain fatty acids are functionally involved in necroptosis. *Cell Chem.Bio.* **24** 1445. PMID: 29033315.

Jochen *et al* (1995) Inhibitory effects of cerulenin on protein palmitoylation and insulin internalization in rat adipocytes. *Biochim.Biophys.Acta.* **1259** 65. PMID: 7492617.

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