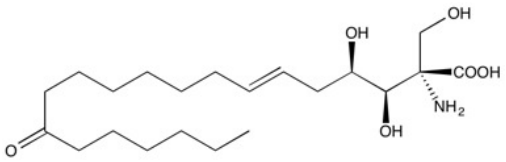
Tribioscience

Myriocin (ISP-1), Blocks sphingolipid biosynthesis

Catalog	Unit
TBI2088-5MG	5 mg
TBI2088-25MG	25 mg

Product Details

Formal Name: (2S,3R,4R,6E)-2-Amino-3,4-dihydroxy-2-(hydroxymethyl)-14-oxo-6-eicosenoic acid
Alternate Names: ISP-1; Thermozymocidin
Molecular Formula: $C_{21}H_{39}NO_6$
Formula Weight: 401.54
CAS Number: 35891-70-4
Purity: >98%
Formulation: powder
Solubility: Soluble in DMSO (25 mg/ml, warm) or methanol (2 mg/ml)
Storage: -20°C
Stability: ≥ 1 year.



Applications

Blocks sphingolipid biosynthesis

Functions

Myriocin is a fungal metabolite with potent immunosuppressant activity. It inhibits serine palmitoyltransferase (K_i = 0.28 nM) blocking the synthesis of ceramide. It was found to suppress melanoma cell proliferation by cell cycle arrest at the G $_2$/M phase through decreased sphingolipid levels and increased p53 and p21 (waf1/cip1) expression.

Application Procedures

First dissolved in DMSO (25 mg/ml, warm) or methanol (2 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or methanol may be stored at -20° for up to 3 months.

For research use only.