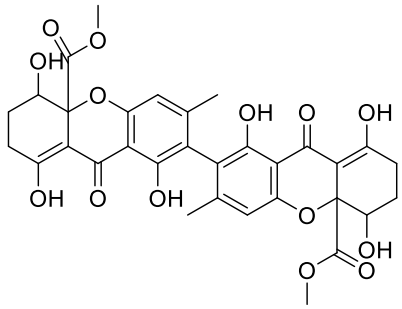
Product data sheet

MedKoo Cat#: 574156 Name: Rugulotrosin A CAS#: 685135-81-3 Chemical Formula: $C_{32}H_{30}O_{14}$ Exact Mass: 638.1636 Molecular Weight: 638.58	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
Rugulotrosin A is an antibiotic active against the Gram-positive bacteria E. faecalis, B. cereus, B. subtilis, and S. aureus. Rugulotrosin A is inactive against Gram-negative bacteria.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
To be determined	To be determined	To be determined

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.57 mL	7.83 mL	15.66 mL
5 mM	0.31 mL	1.57 mL	3.13 mL
10 mM	0.16 mL	0.78 mL	1.57 mL
50 mM	0.03 mL	0.16 mL	0.31 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Qin T, Skraba-Joiner SL, Khalil ZG, Johnson RP, Capon RJ, Porco JA Jr. Atropselective syntheses of (-) and (+) rugulotrosin A utilizing point-to-axial chirality transfer. Nat Chem. 2015 Mar;7(3):234-40. doi: 10.1038/nchem.2173. Epub 2015 Feb 2. PMID: 25698333; PMCID: PMC4339264.
2. Stewart M, Capon RJ, White JM, Lacey E, Tennant S, Gill JH, Shaddock MP. Rugulotrosins A and B: Two new antibacterial metabolites from an Australian isolate of a Penicillium sp. J Nat Prod. 2004 Apr;67(4):728-30. doi: 10.1021/np034038b. PMID: 15104517.

In vivo study

To be determined

7. Bioactivity
Biological target:

Rugulotrosin A is active against the Gram-positive bacteria E. faecalis, B. cereus, B. subtilis, and S. aureus with 99% lethal dose (LD99) values of 1.6, 3.1, 5.5, and 200 μg/ml, respectively.

In vitro activity

Product data sheet

Rugulotrosins A and B displayed significant antibacterial activity against Bacillus subtilis, while rugulotrosin A was also strongly active against Enterococcus faecalis and B. cereus.

Reference: J Nat Prod. 2004 Apr;67(4):728-30. https://pubmed.ncbi.nlm.nih.gov/15104517/

In vivo activity

To be determined

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.