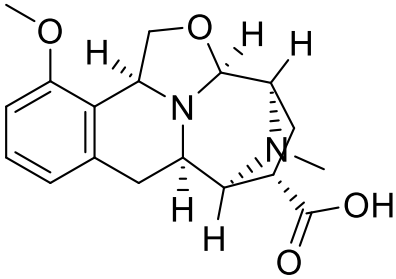


# Product data sheet



MedKoo Cat#: 581279 Name: Quinocarcin CAS: 84573-33-1 Chemical Formula: C <sub>18</sub> H <sub>22</sub> N <sub>2</sub> O <sub>4</sub> Exact Mass: 330.158 Molecular Weight: 330.38	
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:

Quinocarcin are from *Streptomyces melanovinaceus* nov.sp. (-)-Quinocarcin are potent antitumor antibiotics that plays a key role in the construction of tetracyclic THIQ-pyrrolidine core scaffold.

## 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
TBD	TBD	TBD

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.03 mL	15.13 mL	30.27 mL
5 mM	0.61 mL	3.03 mL	6.05 mL
10 mM	0.30 mL	1.51 mL	3.03 mL
50 mM	0.06 mL	0.30 mL	0.61 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

- Hiratsuka T, Koketsu K, Minami A, Kaneko S, Yamazaki C, Watanabe K, Oguri H, Oikawa H. Core assembly mechanism of quinocarcin/SF-1739: bimodular complex nonribosomal peptide synthetases for sequential mannich-type reactions. *Chem Biol*. 2013 Dec 19;20(12):1523-35. doi: 10.1016/j.chembiol.2013.10.011. Epub 2013 Nov 21. PMID: 24269153.
- Herberich B, Scott JD, Williams RM. Synthesis of a netropsin conjugate of a water-soluble epi-quinocarcin analogue: the importance of stereochemistry at nitrogen. *Bioorg Med Chem*. 2000 Mar;8(3):523-32. doi: 10.1016/s0968-0896(99)00314-4. PMID: 10732968.

### In vivo study

TBD

## 7. Bioactivity

### Biological target:

(-)-Quinocarcin are potent antitumor antibiotics that plays a key role in the construction of tetracyclic THIQ-pyrrolidine core scaffold.

### In vitro activity

Quinocarcin and SF-1739, potent antitumor antibiotics, share a common tetracyclic tetrahydroisoquinoline (THIQ)-pyrrolidine core scaffold. This study propose that a biosynthetic pathway comprising a three-component NRPS/MbtH family protein complex, plays a

# Product data sheet



key role in the construction of THIQ-pyrrolidine core scaffold involving sequential Pictet-Spengler and intramolecular Mannich reactions. Data derived from gene inactivation experiments led this study to propose late-modification steps of quinocarcin.

Reference: Chem Biol. 2013 Dec 19;20(12):1523-35. <https://pubmed.ncbi.nlm.nih.gov/24269153/>

In vivo activity

---

TBD

*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.*