# **Product data sheet**



MedKoo Cat#: 329864				
Name: Sancycline HCl				
CAS#: 6625-20-3 (HCl)				
Chemical Formula: C <sub>21</sub> H <sub>23</sub> ClN <sub>2</sub> O <sub>7</sub>		NH <sub>2</sub>		
Molecular Weight: 450.87				
Product supplied as:	Powder			
Purity (by HPLC):	≥ 98%	T OH H-CI		
Shipping conditions	Ambient temperature	н н <b>∗</b>		
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.			
	In solvent: -80°C 3 months; -20°C 2 weeks.			

#### 1. Product description:

Sancycline, also known as GS-2147, is a semi-synthetic tetracycline antibiotic that is more active than tetracycline against 339 strains of anaerobic bacteria (average MIC90s = 1 and 32  $\mu$ g/ml, respectively).

## 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
DMF	20	44.36
DMSO	20	44.36
Ethanol	5	11.09

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.22 mL	11.09 mL	22.18 mL
5 mM	0.44 mL	2.22 mL	4.44 mL
10 mM	0.22 mL	1.11 mL	2.22 mL
50 mM	0.04 mL	0.22 mL	0.44 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

To be determined

In vivo study

To be determined

### 7. Bioactivity

Biological target:

Sancycline exhibits higher activity than tetracycline against a broad spectrum of anaerobic bacteria, with particularly low MIC values (1 and 32  $\mu$ g/ml, respectively). It also remains effective against tetracycline-resistant E. coli, S. aureus, and E. faecalis strains, with MICs ranging from 0.06 to 1  $\mu$ g/ml. In vivo, sancycline demonstrates efficacy against S. aureus in mice, with ED50 values of 0.46 and 0.6 mg/kg for intravenous and subcutaneous administration, respectively.

In vitro activity

To be determined

In vivo activity

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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.