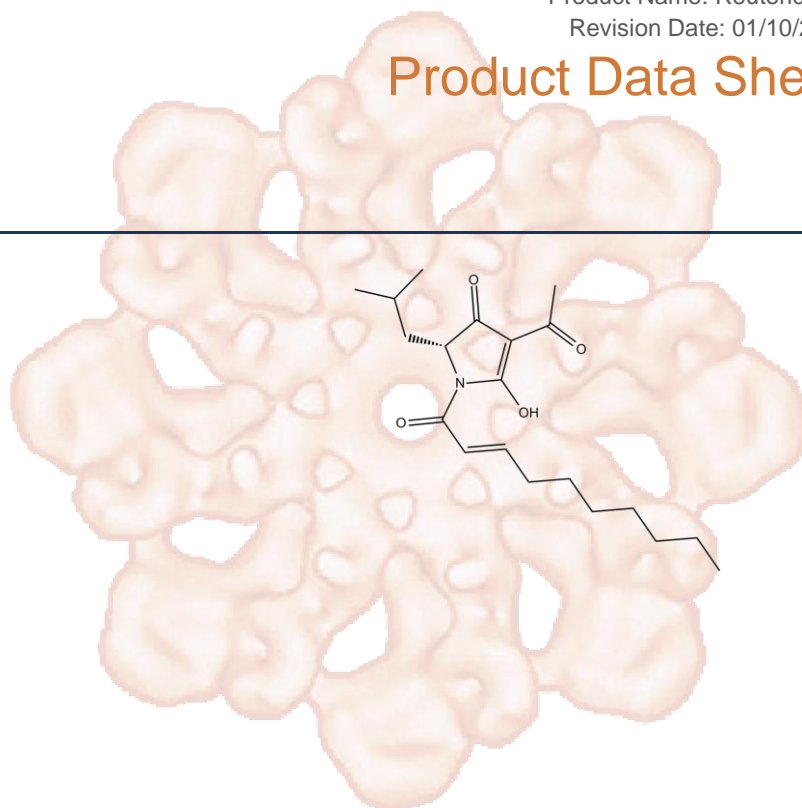


## Reutericyclin

|                  |   |
|------------------|---|
| <b>Cat. No.:</b> | N2833   |
| <b>CAS No.:</b>  | 303957-69-9                                     |
| <b>Formula:</b>  | C <sub>20</sub> H <sub>31</sub> NO <sub>4</sub> |
| <b>M.Wt:</b>     | 349.47  |
| <b>Synonyms:</b> |   |
| <b>Target:</b>   | Microbiology & Virology                         |
| <b>Pathway:</b>  | Antibiotic                                      |
| <b>Storage:</b>  | Store at -20°C                                  |



## Solvent & Solubility

Soluble in DMSO

In Vitro

| Preparing<br>Stock Solutions | Solvent<br>Concentration | Mass | 1mg       | 5mg        | 10mg       |
|------------------------------|--------------------------|------|-----------|------------|------------|
|                              |                          |      |           |            |            |
|                              | <b>1 mM</b>              |      | 2.8615 mL | 14.3074 mL | 28.6148 mL |
|                              | <b>5 mM</b>              |      | 0.5723 mL | 2.8615 mL  | 5.7230 mL  |
|                              | <b>10 mM</b>             |      | 0.2861 mL | 1.4307 mL  | 2.8615 mL  |

Please refer to the solubility information to select the appropriate solvent.

## Biological Activity

Shortsummary

 A small molecular weight antibiotic isolated from *Lactobacillus reuteri*

 IC<sub>50</sub> & Target

### Cell Viability Assay

In Vitro

|                      |  |
|----------------------|--|
| Cell Line:           | <i>C. difficile</i> 9689 (toxintype 0), BAA-1803 (toxintype III, NAP1) and BAA-1875 (toxintype V, NAP7)  |
| Preparation method:  | Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months. |
| Reacting conditions: | 37°C   |
| Applications:        | Reutericyclin is very active against three unrelated tests trains, with mean MICs  |

of 0.09–0.5 mg/L. Moreover, Reutericyclin is bactericidal, causing a >3 log reduction in cells and retains potent bactericidal activity against all 24 h stationary phase cultures. It also shows fast concentration dependent killing.

In Vivo

#### Animal experiment

Applications:

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

1. Hurdle JG, Heathcott AE, Yang L, Yan B, Lee RE. Reutericyclin and related analogues kill stationary phase *Clostridium difficile* at achievable colonic concentrations. *J Antimicrob Chemother.* 2011 Aug; 66(8):1773-6.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

**APEX BIO Technology**

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