

Product Data Sheet

Product Name: Mutanocyclin

Cat. No.: GC71914

Chemical Properties

Cas. No. 875455-92-8

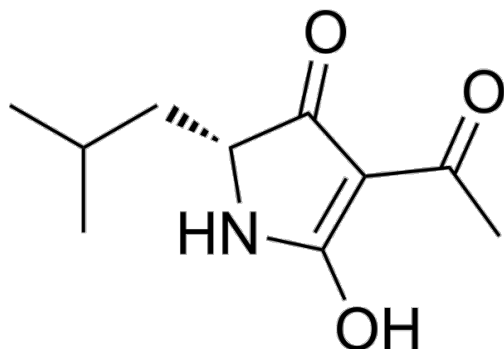
Formula $C_{10}H_{15}NO_3$ M.Wt 197.23

Solubility DMSO : 50 mg/mL (253.51 mM); Storage -20°C
Need ultrasonic; Hygroscopic DMSO has a significant impact on the solubility of product, please use newly opened DMSO)

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Mutanocyclin is a potent antifungal agent. Mutanocyclin inhibits *Candida albicans* (*C. albicans*) filamentation. Mutanocyclin decreases the mRNA expression of HWP1, ECE1, FLO8, TEC1. Mutanocyclin inhibits yeast-form in ex vivo mouse.

Mutanocyclin (8, 16, 32 µg/mL, 24, 36 h) inhibits *Candida albicans* (*C. albicans*) filamentation in a

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dose-dependent manner^[1].

Mutanocyclin (32 µg/mL) decreases the mRNA expression of HWP1, ECE1, FLO8, TEC1 in *C. albicans* cells^[1].

Mutanocyclin functions by regulating the PKA catabolic subunit Tpk2 and its preferential binding target Sfl1^[1].

Mutanocyclin (32 µg/mL; 24 h infects tongues of mouse) inhibits yeast-form in ex vivo mouse tongue infection models of *C. albicans*^[1].

Mutanocyclin (6.4, 12.8, 25.6 µg/mL; 48 h) attenuates the virulence of *C. albicans* in the *G. mellonella* infection model^[1].

References:

[1]. Tao L, et al. Streptococcus mutans suppresses filamentous growth of Candida albicans through secreting mutanocyclin, an unacylated tetramic acid. Virulence. 2022 Dec;13(1):542-557.

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