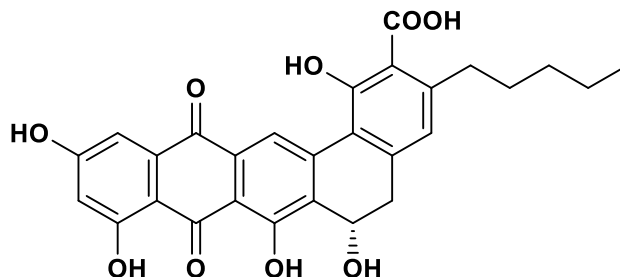


## PRODUCT DATA SHEET

Date: Jan. 12, 2022

### Bequinostatin A (Glutathione S-transferase inhibitor)



### Specifications

Code No.	: 14681
CAS#	: 151013-37-5
Molecular Formula	: C <sub>28</sub> H <sub>24</sub> O <sub>9</sub>
Molecular Weight	: 504.491
Source	: <i>Streptomyces</i> sp. MI384-DF12
Supplied as	: Powder
Purity	: > 75% (HPLC) (contains about 20% bequinostatin C)
Long Term Storage	: at - 20 °C
Solubility	: Soluble in DMSO, MeOH, Pyridine Insoluble in H <sub>2</sub> O

### Application Notes

Bequinostatin A is isolated from the culture broth of *Streptomyces* sp. MI384-DF12, and it has a significant inhibitory activity against human pi class glutathione S-transferase (GSTπ) expressed in carcinogenesis (IC<sub>50</sub> value is 4.6 μg / mL).<sup>1)</sup> It exhibits no toxicity after intraperitoneal injection in mice at a dose of 100 mg/kg.<sup>1)</sup> The absolute stereochemistry of the hydroxyl group was determined by the X-ray diffraction analysis.<sup>2)</sup>

**Note:** Bequinostatin A seems to change to bequinostatin C slowly in the solution condition. The stock solution should be stored at 4 °C or lower, and should be used within a couple of days.

### References

- 1) Bequinostatins A and B, new inhibitors of glutathione S-transferase, produced by *Streptomyces* sp. MI384-DF12. Production, isolation, structure determination and biological activities. Aoyama T, *et al. J Antibiot.* 1993 **46**(6) 914-920.
- 2) The crystal structure data was deposited to the Cambridge crystallographic data centre as CCDC number 2009768.