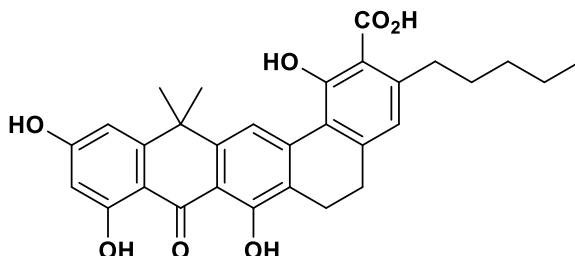


## PRODUCT DATA SHEET

Date: May 8, 2020

### Benastatin B



Synonyms:

### Specifications

Code No.	: 14653
CAS#	: 138968-86-2
Molecular Formula	: C <sub>30</sub> H <sub>30</sub> O <sub>7</sub>
Molecular Weight	: 502.563
Source	: <i>Streptomyces</i> sp. MI384-DF12
Appearance	: Brownish-yellow powder
Purity	: > 90% (HPLC)
Long Term Storage	: at - 20 °C
Solubility	: Soluble in DMSO. Poorly soluble in MeOH, Acetone, EtOAc. Insoluble in H <sub>2</sub> O.

### Application Notes

Benastatin B is isolated from the culture broth of *Streptomyces* sp. MI384-DF12 as an inhibitor of glutathione S-transferase (GST).<sup>1,2)</sup> The inhibition of benastatin B against GST is competitive with 3,4-dichloronitrobenzene ( $K_i$ :  $3.7 \times 10^{-6}$  M), and noncompetitive with glutathione ( $K_i$ :  $4.2 \times 10^{-6}$  M). Benastatin B has activity against Gram-positive bacteria including methicillin-resistant *Staphylococcus aureus* (MRSA).<sup>1)</sup>

### References

- 1) Benastatins A and B, new inhibitors of glutathione S-transferase, produced by *Streptomyces* sp. MI384-DF12. I. Taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. *J Antibiot.* 1992 **45**(9) 1385-1390.
- 2) Benastatins A and B, new inhibitors of glutathione S-transferase, produced by *Streptomyces* sp. MI384-DF12. II. Structure determination of benastatins A and B. Aoyama T. et al. *J Antibiot.* 1992 **45**(9) 1391-1396.