

**Catalog # 10-3289**

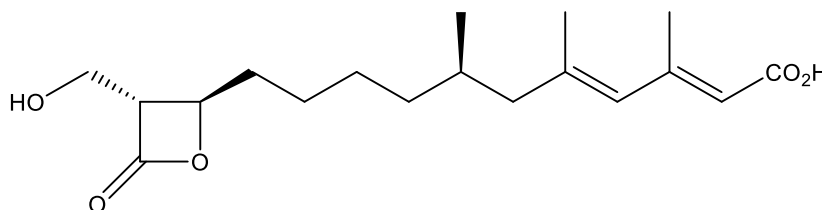
**Hymeglusin**

CAS# 29066-42-0

11-[3R-(Hydroxymethyl)-4-oxo-2R-oxetanyl]-3,5,7R-trimethyl-2E,4E-undecadienoic acid

L-659699; Antibiotic 1233A; Antibiotic F244

Lot # X107865



Inhibitor of eukaryotic mevalonate biosynthesis via inhibition of HMG-CoA synthase,  $IC_{50}=0.12 \mu M$ .<sup>1</sup> Acts via covalent modification of the active site Cys129.<sup>1,2</sup> Inhibits cholesterol biosynthesis in rats (45% at 25 mg/Kg),<sup>1</sup> Also inhibits bacterial HMG-CoA synthase.<sup>3</sup> Inhibits dengue virus replication.<sup>4</sup>

- 1) Greenspan *et al.* (1987), *Inhibition of hydroxymethylglutaryl-coenzyme A synthase by L-659,699*; Proc. Natl. Acad. Sci. USA, **84** 7488
- 2) Tomoda *et al.* (2004), *Binding site for fungal beta-lactone hymeglusin on cytosolic 3-hydroxy-3-methylglutaryl coenzyme A synthase*; Biochem. Biophys. Acta, **1636** 22
- 3) Skaff *et al.* (2012), *Biochemical and structural basis for inhibition of Enterococcus faecalis hydroxymethylglutaryl-CoA synthase, mvaS, by hymeglusin*; Biochemistry, **51** 4713
- 4) Rothwell *et al.* (2009), *Cholesterol biosynthesis modulation regulates dengue viral replication*; Virology, **389** 8

**PHYSICAL DATA**

Molecular Weight:	324.41
Molecular Formula:	C <sub>18</sub> H <sub>28</sub> O <sub>5</sub>
Purity:	96% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**