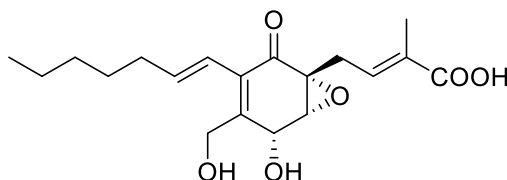


Ambuic acid

Code No.: **BIA-A2563**

Pack sizes: **1 mg, 5 mg**



Synonyms : (+)-Ambuic acid

Specifications

CAS #	: 340774-69-8
Molecular Formula	: C ₁₉ H ₂₆ O ₆
Molecular Weight	: 350.41
Source	: <i>Penicillium</i> sp.
Appearance	: Brown oil
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Ambuic acid is an antifungal cyclohexanone metabolite produced by *Pestalotiopsis* sp. Ambuic acid inhibits the biosynthesis of quorum sensing peptides in Gram-positive bacteria. Ambuic acid may exert anti-inflammatory action by blocking the activation of the ERK/JNK MAPK signaling pathway, without the involvement of the p38 MAPK or NF-κB signaling pathways. Ambuic acid demonstrates potent antiproliferative activity.

References

1. Ambuic acid, a highly functionalized cyclohexenone with antifungal activity from *Pestalotiopsis* spp. and *Monochaetia* sp. Li J.Y. et al. *Phytochem.* 2001, 56, 463.
2. Ambuic acid inhibits the biosynthesis of cyclic peptide quorumones in gram-positive bacteria. Jiro N. et al. *Antimicrob. Agents Chemother.* 2009, 53, 580.
3. Anti-inflammatory action of ambuic acid, a natural product isolated from the solid culture of *Pestalotiopsis neglecta*, through blocking ERK/JNK mitogen-activated protein kinase signaling pathway. Zhang Q. et al. *Exp. Ther. Med.* 2018, 16, 153.
4. Anti-proliferative ambuic acid derivatives from Hawaiian endophytic fungus *Pestalotiopsis* sp. FT172. Li C-S. et al. *Phytochem.* 2017, 140, 77.