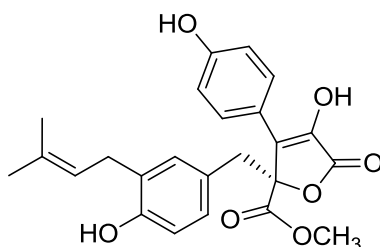


Butyrolactone I

Code No.: **BIA-B1406**

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



Synonyms : Olomoucine

Specifications

CAS #	: 87414-49-1
Molecular Formula	: C ₂₄ H ₂₄ O ₇
Molecular Weight	: 424.5
Source	: <i>Aspergillus sp.</i>
Appearance	: Light yellow solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Butyrolactone I is one of a family of three butyrolactones isolated from *Aspergillus fumigatus*, first reported in 1983. Butyrolactone I exhibits antitumor activity, inhibiting the cell cycle at the G1/S and G2/M transitions. Butyrolactone I is a selective inhibitor of cyclin-dependent kinases CDK1/cyclin B, CDK2 and CDK5, and is an important bioprobe for understanding the cellular roles of CDKs.

References

1. Metabolic products of *Aspergillus terreus*. IX. Biosynthesis of butyrolactone derivatives isolated from strains IFO 8835 and 4100. Nitta K. et al. Chem. Pharm. Bull. 1983, 31, 1528.
2. Butyrolactone I induces cyclin B1 and causes G2/M arrest and skipping of mitosis in human prostate cell lines. Suzuki M. et al. Cancer Lett. 1999, 138, 121.
3. Butyrolactone I, a selective inhibitor of cdk2 and cdc2 kinase. Kitagawa M. et al. Oncogene 1993, 8, 2425.

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