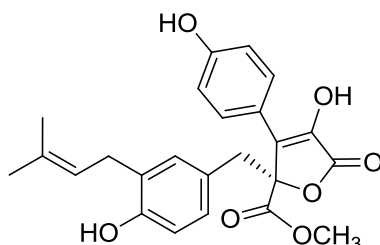


## Butyrolactone I

Code No.: **BIA-B1406**

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



Synonyms : Olomoucine

### Specifications

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

### 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.