

<b>Product Name:</b>	Butyrolactone I
<b>Product Number:</b>	B057
<b>CAS Number:</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>Appearance:</b>	Light yellow solid
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	<p>Butyrolactone I is one of a family of three butyrolactones isolated from <i>Aspergillus fumigatus</i>, first reported in 1983. 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.</p> <p>Butyrolactone I is soluble in ethanol, methanol, DMF and DMSO.</p>
<b>Mechanism of Action:</b>	Butyrolactone I inhibits the cell cycle at the G1/S and G2/M transitions.
<b>References:</b>	<p>Metabolic products of <i>Aspergillus terreus</i>. IX. Biosynthesis of butyrolactone derivatives isolated from strains IFO 8835 and 4100. Nitta K. et al. Chem. Pharm. Bull. 1983, 31, 1528.</p> <p>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.</p> <p>Butyrolactone I, a selective inhibitor of cdk2 and cdc2 kinase. Kitagawa M. et al. Oncogene 1993, 8, 2425.</p>