

PRODUCT DATA SHEET

Brefeldin A Code: BIA-B1122

Pack sizes: 5 mg, 25 mg

Synonyms : Ascotoxin, Cyanein, Decumbin, Synergisidin, Nectrolide

Specifications

CAS # : 20350-15-6 Molecular Formula : $C_{16}H_{24}O_4$ Molecular Weight : 280.4

Source : Curvularia sp. MST-FP1650

Appearance : White solid
Purity : > 99% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Brefeldin A is a potent inhibitor of cell growth first described in 1958, then independently "rediscovered" by several groups as a potent active in a broad range of bioassays. Brefeldin has been shown to be antiviral, antibiotic, antifungal, antitumor and herbicidal. Early studies on the mode of action of brefeldin identified inhibition of protein and nucleic acid synthesis by disruption of the Golgi apparatus. The precise molecular target has been shown to be a subset of Sec7-type GTP exchange factors (GEFs) that activate a small GTPase, Arf1p, an integral component of protein trafficking and signalling.

References

1. Decumbin, a new compound from a species of Penicillium. Singleton V.L. et al. *Nature* **1958**, 181, 1072.

2. Golgi-disturbing agents. Dinter A. and Berger E.G. Histochem. Cell Biol. 1998, 109, 571.

3. Brefeldin A: deciphering an enigmatic inhibitor of secretion. Nebenführ A. et al. *Plant Physiol.* **2002**, 130,1102.