

PRODUCT DATA SHEET

Calphostin C

Pack sizes: 0.1 mg, 0.5 mg

Synonyms : Antibiotic UCN 1028 C, UCN-1028 C

Specifications

CAS # : 121263-19-2 Molecular Formula : $C_{44}H_{38}O_{14}$ Molecular Weight : 790.8

Source : Cladosporium cladosporioides MST-FP1798

Appearance : Dark red lyophilisate

Purity : > 95% by HPLC

Long Term Storage : +4°C light sensitive

Solubility : Soluble in ethanol, methanol, DMF or DMSO

Application Notes

Calphostin C is a perylenequinione isolated from the fungus, *Cladosporium cladosporioides*. It is a potent and specific inhibitor of protein kinase C, with inhibition being light dependent. Calphostin C has also been shown to inhibit cell proliferation and induce apoptosis *in vitro*.

References

- 1. Growth inhibition induced by Ro 31-8220 and calphostin C in human glioblastoma cell lines is associated with apoptosis and inhibition of CDC2 kinase. Begemann M. et al. Anticancer Res. 1998, 18, 3139.
- 2. Inhibition of protein kinase C by calphostin C is light-dependent. Bruns R.F. et al. *Biochem. Biophys. Res. Commun.* **1991**, 176, 288.
- 3. Calphostins (UCN-1028), novel and specific inhibitors of protein kinase C. I. Fermentation, isolation, physico-chemical properties and biological activities. Kobayashi E. et al. *J. Antibiot.* **1989**, 42, 1470.
- 4. Calphostins, novel and specific inhibitors of protein kinase C. II. Chemical structures. Kobayashi E. et al. *J. Antibiot.* **1989**, 42, 1475.