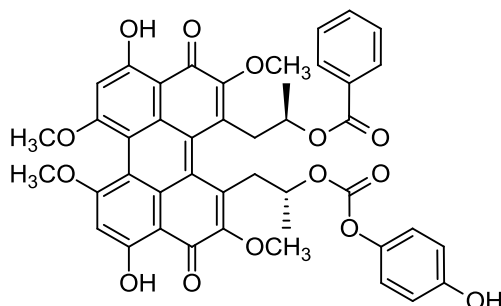


Calphostin C

Code No.: **BIA-C1014**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : UCN 1028 C, PKF 115-384

Specifications

CAS #	: 121263-19-2
Molecular Formula	: C ₄₄ H ₃₈ O ₁₄
Molecular Weight	: 790.8
Source	: <i>Cladosporium cladosporioides</i>
Appearance	: Dark Red Solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Calphostin C (PKF115-584) is a perylenequinone isolated from the fungus, *Cladosporium cladosporioides*. Calphostin C is a potent and specific inhibitor of protein kinase C (PKC), with inhibition being light dependent. Calphostin C inhibits cell proliferation and induces apoptosis in vitro. Calphostin C is an antagonist of Tcf4/b-catenin signalling, inhibiting the expression of survivin and inducing apoptosis in several tumor cell lines.

References

1. 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. Antibiotics, 1989, 42, 1470.
2. Calphostins, novel and specific inhibitors of protein kinase C. II. Chemical structures. Kobayashi E. et al., J. Antibiotics, 1989, 42, 1475.
3. Inhibition of protein kinase C by calphostin C is light-dependent. Bruns R.F. et al., Biochem. Biophys. Res. Commun., 1991, 176, 288.
4. 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.
5. Small-molecule antagonists of the oncogenic Tcf/beta-catenin protein complex. Lepourcelet M. et al., Cancer Cell. 2004, 5, 91.