

Product Name:	Calphostin C
Product Number:	C161
CAS Number:	121263-19-2
Molecular Formula:	$C_{44}H_{38}O_{14}$
Molecular Weight:	790.8
Appearance:	Dark Red Solid
Storage Conditions:	-20°C
Description:	Calphostin C (PKF115-584) is a perylenequinone isolated from the fungus, <i>Cladosporium cladosporioides</i> and inhibits cell proliferation and induces apoptosis in vitro.
Mechanism of Action:	<p>Calphostin C is soluble in ethanol, methanol, DMF and DMSO.</p> <p>Calphostin C is a potent and specific inhibitor of protein kinase C (PKC), with inhibition being light dependent. Calphostin C is an antagonist of Tcf4/b-catenin signalling, inhibiting the expression of survivin and inducing apoptosis in several tumor cell lines.</p>
References:	<p>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.</p> <p>Calphostins, novel and specific inhibitors of protein kinase C. II. Chemical structures. Kobayashi E. et al. , J. Antibiotics, 1989, 42, 1475.</p> <p>Inhibition of protein kinase C by calphostin C is light-dependent. Bruns R.F. et al. , Biochem. Biophys. Res. Commun., 1991, 176, 288.</p> <p>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.</p> <p>Small-molecule antagonists of the oncogenic Tcf/beta-catenin protein complex. Lepourcelet M. et al. Cancer Cell. 2004, 5, 91.</p>