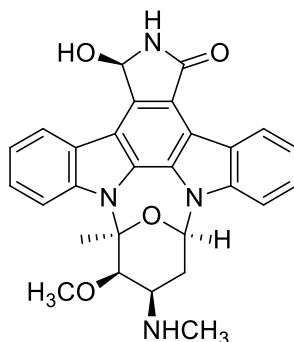


UCN-01

Code No.: **BIA-U1096**

Pack sizes: **1 mg, 5 mg**



Synonyms : 7-Hydroxystaurosporine

Specifications

CAS #	: 112953-11-4
Molecular Formula	: C₂₈H₂₆N₄O₄
Molecular Weight	: 482.5
Source	: <i>Streptomyces</i> sp.
Appearance	: White Film
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

UCN-01 is an indolocarbazole isolated from a high staurosporine-producing *Streptomyces* culture. UCN-01 inhibits protein kinase C (PKC) and cyclin-dependant kinase 2 (CDK2), resulting in accumulation of cells in the G1 phase and induction of apoptosis. UCN-01 also enhances the cytotoxicity of other anti-cancer drugs, such as DNA-damaging agents and anti-metabolite drugs, through putative abrogation of G2 and/or S phase accumulation induced by the latter agents.

References

1. UCN-01-induced cell cycle arrest requires the transcriptional induction of p21(waf1/cip1) by activation of mitogen-activated protein/extracellular signal-regulated kinase/extracellular signal-regulated kinase pathway. Facchinetti M.M. et al., *Cancer Res.* 2004, 64, 3629.
2. UCN-01 (7-hydroxystaurosporine) and other indolocarbazole compounds: a new generation of anti-cancer agents for the new century? Akinaga S. et al., *Anticancer Drug Des.* 2000, 15, 43.
3. UCN-01 and UCN-02, new selective inhibitors of protein kinase C. II. Purification, physico-chemical properties, structural determination and biological activities. Takahashi I. et al., *J. Antibiot.* 1989, 42, 571.