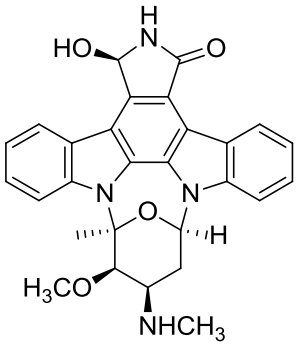
bioaustralis
fine chemicals

PRODUCT DATA SHEET

UCN-01

Code No.: **BIA-U1096**

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



Synonyms : 7-Hydroxystaurosporine

Specifications

CAS #	:	**112953-11-4**
Molecular Formula	:	**$C_{28}H_{26}N_4O_4$**
Molecular Weight	:	**482.5**
Source	:	***Streptomyces* sp.**
Appearance	:	**White Film**
Purity	:	**>99% 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 kinase/extracellular signal-regulated kinase pathway. Facchinetti M.M. et al. Cancer
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.

Updated: 2 December 2014

Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com