Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

3,3'-Diindolylmethane

Catalog No: tcsc1652

Available Sizes

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
1968-05-4

Formula:
$C_{17}H_{14}N_2$

Pathway:
Others

Target:
Androgen Receptor

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
DIM;Arundine;HB 236

Observed Molecular Weight:
246.31

Product Description

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3,3\'-Diindolylmethane is a strong, pure **androgen receptor** (AR) antagonist.

IC50 & Target: Androgen receptor[1]

In Vitro: 3,3\'-Diindolylmethane (DIM) is a strong antagonist of androgen receptor (AR) function but exhibits less than obvious structural similarity to the endogenous AR ligand, dihydrotestosterone (DHT). 3,3\'-Diindolylmethane is a major digestive product of indole-3-carbinol, a potential anticancer component of cruciferous vegetables. 3,3\'-Diindolylmethane exhibits potent antiproliferative and antiandrogenic properties in androgen-dependent human prostate cancer cells. 3,3\'-Diindolylmethane suppresses cell proliferation of LNCaP cells and inhibits DHT stimulation of DNA synthesis. Moreover, 3,3\'-Diindolylmethane inhibits endogenous PSA transcription and reduced intracellular and secreted PSA protein levels induced by DHT in LNCaP cells. Also, 3,3\'-Diindolylmethane inhibits, in a concentration-dependent manner, the DHT-induced expression of a prostate-specific antigen promoter-regulated reporter gene construct in transiently transfected LNCaP cells. Co-treatment with 50 μM 3,3\'-Diindolylmethane partially inhibits the translocation of AR induced by DHT treatment and showed distribution of the AR to be both cytoplasmic and nuclear. Furthermore, 3,3\'-Diindolylmethane treatment prevents the formation of AR foci in the nucleus. 3,3\'-Diindolylmethane alone produces a predominantly cytoplasmic distribution of fluorescence[1].

In Vivo: Mice are randomized into two groups and are treated daily s.c. with either vehicle or 3,3\'-Diindolylmethane (10 mg/kg) for 30 days. Tumor volume and the weight of mice are recorded once every 3 days using calipers. 3,3\'-Diindolylmethane (DIM) treatment resulted in a marked inhibition of SNU-484 xenograft tumor growth. Notably, the body weight of mice from both groups did not significantly differ from the vehicle control following 30 days of drug exposure, suggesting that 3,3\'-Diindolylmethane has no severe toxicity to the mice. Taken together, these findings demonstrate that 3,3\'-Diindolylmethane administration significantly inhibited SNU-484 xenograft growthin vivo mediated by the inactivation of YAP[2].