

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

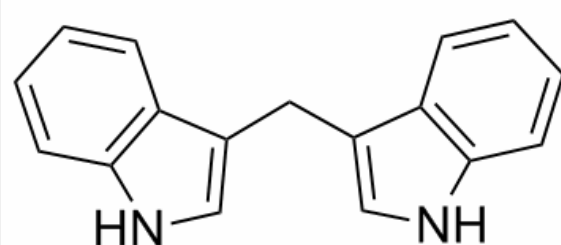
Product Description

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 μ M 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 growth in vivo mediated by the inactivation of YAP^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!