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

Bisdemethoxycurcumin

Catalog No: tcsc3737

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
33171-05-0

Formula:
$C_{19}H_{16}O_4$

Pathway:
Apoptosis;Autophagy

Target:
Apoptosis;Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 31 mg/mL (100.54 mM)

Alternative Names:
Curcumin III;Didemethoxycurcumin

Observed Molecular Weight:
308.33

Product Description

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Bisdemethoxycurcumin(Curcumin III; Didemethoxycurcumin) is a natural derivative of curcumin with anti-inflammatory and anti-cancer activities.

IC50 value:

Target: Anticancer natural compound

in vitro: BDMC-induced apoptosis was mediated by a combinatory inhibition of cytoprotective proteins, such as Bcl2 and heme oxygenase-1 and increased generation of reactive oxygen species. Intriguingly, BDMC-induced apoptosis was reversed with co-treatment of sr144528, a cannabinoid receptor (CBR) 2 antagonist, which was confirmed with genetic downregulation of the receptor using siCBR2 [1]. Induction of cell cycle arrest in HepG2 cells by NB and BDCur in combination was evidenced by accumulation of the G2/M cell population. Further investigation on the molecular mechanism showed that NB and BDCur in combination resulted in a significant decrease in the expression level of Cdc2 and cyclin B [2]. BDMC treatment activated Sirt1/AMPK signaling pathway. Moreover, downregulating Sirt1 by the pharmacological inhibitor nicotianamine or small interfering RNA blocked BDMC-mediated protection against t-BHP-mediated decrease in proliferation [4].

in vivo: human gastric adenocarcinoma xenograft model was generated in vivo using nude mice and BDMC was observed to suppress the growth and activity of tumors, in addition to improving the physical and mental capacity of the mice [3].