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

DMAT

Catalog No: tcsc1289

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
749234-11-5

Formula:
$C_9H_7Br_4N_3$

Pathway:
Stem Cell/Wnt;Cell Cycle/DNA Damage

Target:
Casein Kinase;Casein Kinase

Purity / Grade:
>98%

Solubility:
DMSO : 50 mg/mL (104.87 mM; Need ultrasonic)

Alternative Names:
Casein kinase II Inhibitor;CK2 Inhibitor

Observed Molecular Weight:
476.79

Product Description

DMAT is a potent and specific **CK2** inhibitor with an $\mathbf{IC_{50}}$ value of 130 nM.

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IC50 & Target: IC50: 130 nM (CK2)[3]

In Vitro: DMAT (1 μM-2.5 μM) DMAT is more efficient in killing antiestrogen resistant cells than parental antiestrogen sensitive MCF-7 cells. DMAT-induced cell death of antiestrogen resistant cells is mediated by caspases. DMAT inhibits CK2 activity but the inhibition is similar in the three cell lines, MCF-7, TAMR-1 and 182R-6[1]. DMAT has effects on H295R cell proliferation at concentrations of 10^{-4} and 10^{-5}mol/Las compared with the control. DMAT (100 μM) significantly increases apoptosis of H295R cells. DMAT (1 nM-1 μM) significantly decreases aldosterone release into supernatants of 72-h H295R cell cultures as compared with the control[2]. DMAT also inhibits PIM1 by a mechanism which is competitive with respect to ATP, and it is a powerful inhibitor of kinases other than CK2[3].

In Vivo: DMAT application in vivo reduces tumor growth in a xenotransplant model by interference with tumor cell proliferation. Biochemical parameters and histology following DMAT administration revealed no alterations in liver tissue[4].