

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

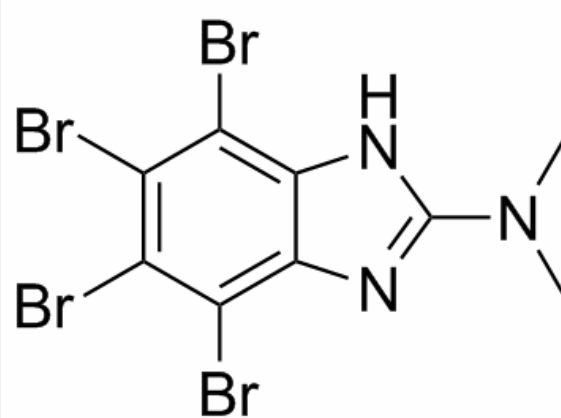
Product Description

DMAT is a potent and specific **CK2** inhibitor with an **IC₅₀** value of 130 nM.

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

In Vitro: DMAT (1 μ M-2.5 μ M) 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/L as compared with the control. DMAT (100 μ M) significantly increases apoptosis of H295R cells. DMAT (1 nM-1 μ M) 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].



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