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

N3PT

Catalog No: tcsc1502

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
13860-66-7

Formula:
$C_{13}H_{19}Cl_2N_3OS$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
N3-pyridyl thiamine

Observed Molecular Weight:
336.28

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Product Description

N3PT(N3-pyridyl thiamine) is a potent and selective transketolase(TK) inhibitor (IC50= 22 nM for Apo-TK) both in vitro and in vivo.

IC50 Value: 22 nM(Apo-TK) ; 26 nM (EC50, Cellular TK) [1]

Target: transketolase

in vitro: N3PT inhibits transketolase activity in a cell based assay. Competitive inhibition of TK by N3PT in cells treated with increasing doses of thiamine, expressed as percentage enzymatic activity (the slope of initial linear range) of controls not treated with compounds [1].

in vivo: Tumors were induced in mice at day 0 and mice were then treated at day 7 with vehicle alone or with N3PT [2]. Low-thiamine diet enhances the sensitivity to N3PT inhibition of TK in spleen. Animals were switched to diets containing 16.5 mg/kg (unchanged), 5 mg/kg, 1 mg/kg, or 0 mg/kg thiamine, from a normal chow containing 16.5mg/kg thiamine [1].