Taiclone®
Quality Guarantee

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

Cyclophosphamide

Catalog No: tcsc1425

Available Sizes

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
50-18-0

Formula:
$C_7H_{15}Cl_2N_2O_2P$

Pathway:
Cell Cycle/DNA Damage

Target:
DNA Alkylator/Crosslinker

Purity / Grade:
>98%

Solubility:
H2O : ≥ 55 mg/mL (210.66 mM); DMSO : ≥ 38 mg/mL (145.54 mM)

Observed Molecular Weight:
261.09

Product Description

Cyclophosphamide is a synthetic **alkylating** agent chemically related to the nitrogen mustards with antineoplastic and immunosuppressive activities.

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IC50 & Target: DNA Alkylator[1]

In Vitro: Cyclophosphamide induces outer membrane blebbing, leads to DNA fragmentation, as revealed by TUNEL staining of free 3\'-OH DNA ends, and induces cleavage of the caspase 3 and caspase 7 substrate PARP in 9L/P450 cells. Bcl-2 expression fully blocks the activation of both initiator caspases as well as the effector caspase 3 in cells treated with activated Cyclophosphamide. Bcl-2 inhibits the cytotoxic effects but not the cytostatic effects of activated Cyclophosphamide[1]. Cyclophosphamide inhibits the AChE reversibly with an IC_{50} of 511 μM[2]. Carbon tetrachloride does not affect the direct cytotoxicity of cyclophosphamide or 4-hydroxycyclophosphamide to cells in culture[3].