

PBOX 6

Catalog No: tcsc0035400



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg



Specifications

CAS No:

290814-68-5

Formula:

$C_{25}H_{20}N_2O_3$

Pathway:

Cell Cycle/DNA Damage;Cytoskeleton;Apoptosis

Target:

Microtubule/Tubulin;Microtubule/Tubulin;Apoptosis

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

396.44

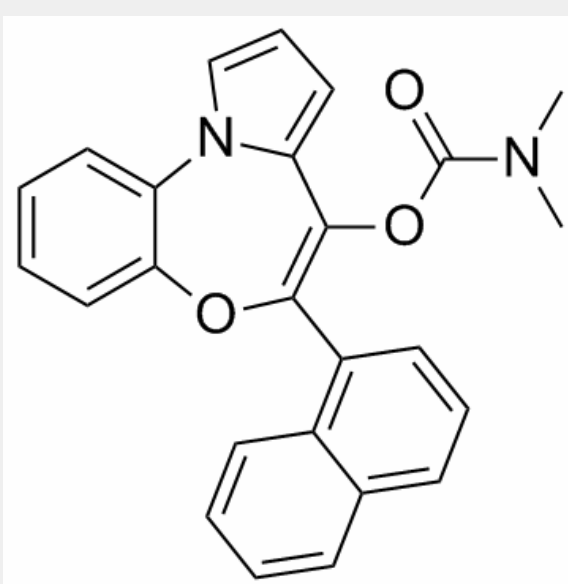
Product Description

PBOX 6 is a pyrrolo-1,5-benzoxazepine (PBOX) compound, acts as a **microtubule**-depolymerizing agent and an apoptotic agent.

IC50 & Target: Apoptosis^[1], Microtubule^[3]

In Vitro:

PBOX 6 is a potent apoptotic PBOX, but does not elicit a general toxic effect in a rat R2C Leydig cell line. PBOX 6 (0-25 μ M, 16 h) results in dose- and time-dependent induction of apoptosis, and also causes DNA fragmentation at 10 μ M in HL-60 cells. PBOX 6 (10 μ M) induces apoptosis through activation of caspase 3-like proteases in HL-60 cells. PBOX 6 (10 μ M) induces apoptosis and exerts an accumulation of cytochrome c in the cytosol, but this effect is not triggered by oxidative stress, and is independent of peripheral-type benzodiazepine receptor (PBR) and NF- κ B^[1]. PBOX 6 (25 μ M) induces apoptosis in MCF-7 cells through activation of caspase-7^[2]. PBOX 6 (10 μ M) induces the redistribution of cypA from the nucleus to the cytosol of the cell in K562 cells. PBOX 6 (10 μ M) induces nucleocytoplasmic redistribution of cypA and pin1 through a JNK-dependent manner, also dependent on upstream activation of a trypsin-like serine protease, and this effect correlates with G2/M arrest in K562 cells^[3].



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