

# 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

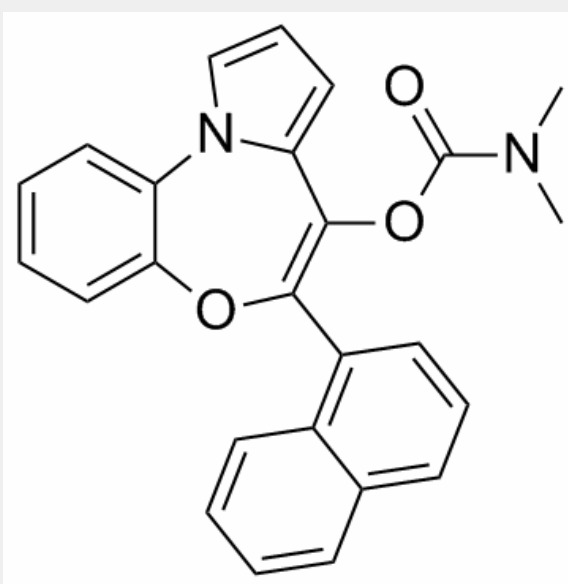
## Product Description

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

IC50 & Target: Apoptosis<sup>[1]</sup>, Microtubule<sup>[3]</sup>

**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  $\mu\text{M}$ , 16 h) results in dose- and time-dependent induction of apoptosis, and also causes DNA fragmentation at 10  $\mu\text{M}$  in HL-60 cells. PBOX 6 (10  $\mu\text{M}$ ) induces apoptosis through activation of caspase 3-like proteases in HL-60 cells. PBOX 6 (10  $\mu\text{M}$ ) 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- $\kappa\text{B}$ <sup>[1]</sup>. PBOX 6 (25  $\mu\text{M}$ ) induces apoptosis in MCF-7 cells through activation of caspase-7<sup>[2]</sup>. PBOX 6 (10  $\mu\text{M}$ ) induces the redistribution of cypA from the nucleus to the cytosol of the cell in K562 cells. PBOX 6 (10  $\mu\text{M}$ ) 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<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!