

# CTX1

**Catalog No: tcsc0035392**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

**CAS No:**

501935-96-2

**Formula:**

$C_{14}H_{10}N_4$

**Pathway:**

Apoptosis

**Target:**

MDM-2/p53

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

234.26

## Product Description

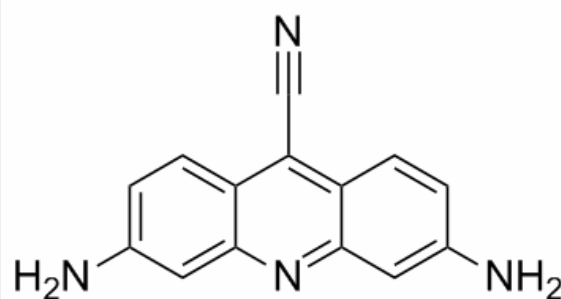
CTX1 is a novel small molecule **p53** activator.

IC50 & Target: p53<sup>[1]</sup>

***In Vitro:***

CTX1 induces significant p53-dependent cell death preferentially in HdmX-expressing cells as compare to cells in which p53 is inactivated by Hdm2 overexpression or p53 is knocked down using p53 targeting shRNA. CTX1 can induce p53 protein levels in the p53 mutant cell line, HT29. It is also found that CTX1 exhibits potent activity (LD50 ~1  $\mu$ M) as a single agent on primary AML patient samples in a similar fashion to AML cell lines. After 16 hr of treatment with CTX1 in HCT116 p53-wild-type cells there is a decrease in S phase from 23% to 3% while HCT116 p53-null cells exhibit a reduction in S phase from 34% to 28%. The combination of low doses of CTX1 and nutlin-3 leads to a significant enhancement of apoptosis in p53-wildtype, but not p53-null cells<sup>[1]</sup>.

***In Vivo:*** CTX1 even as a single agent significantly enhances the survival of mice in this model system. Mice treated with CTX1 alone or in combination with nutlin-3 has a significantly increased survival time (p[1].



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