

## CTX1

Chemical P	roperties
CAS No.:	501935-96-2
Formula:	C14H10N4
Molecular Weight:	234.26
Appearance:	N/A
Storage:	0-4°C for short te

# **Biological Description**

Description	CTX1 is a small molecule activator of p53.
Targets(IC <sub>50</sub> )	p53: None
In vitro	CTX1 can induce p53 protein levels in the p53 mutant cell line, HT29 and it also induces significant p53- dependent cell death preferentially in HdmX-expressing cells as compared to cells in which p53 is inactivated by Hdm2 overexpression or p53 is knocked down using p53 targeting shRNA. It is also found that CTX1 shows potent activity (LD50 ~1 $\mu$ M) as a single agent on primary AML patient samples in a similar fashion to AML cell lines. After CTX1(16 h) treatment 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.
In vivo	Mice treated with CTX1 alone or in combination with nutlin-3 has a significantly increased survival time (p<0.0001). In this model system, CTX1 even as a single agent significantly enhances the survival of mice.

## Solubility Information

Solubility

< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.269 mL	21.344 mL	42.688 mL
5 mM	0.854 mL	4.269 mL	8.538 mL
10 mM	0.427 mL	2.134 mL	4.269 mL
50 mM	0.085 mL	0.427 mL	0.854 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: -  $80 \degree$ C for 6 months; -  $20 \degree$ C for 1 month. Please use it as soon as possible.

#### Reference

1. Karan G, et al. Identification of a Small Molecule That Overcomes HdmX-Mediated Suppression of p53. Mol Cancer Ther. 2016 Apr;15(4):574-582.

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