

Bz 423

## Chemical Properties

CAS No. : 216691-95-1

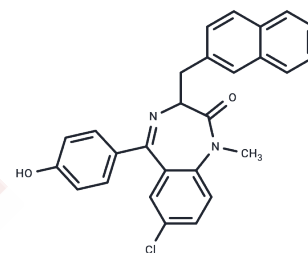
Formula: C<sub>27</sub>H<sub>21</sub>ClN<sub>2</sub>O<sub>2</sub>

Molecular Weight: 440.92

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Bz 423 is a potent immunomodulator that induces apoptosis by activating Bax and Bak to induce mitochondrial outer membrane permeabilization and cytochrome c release. Bz 423 shows partial activity in a mouse model of lupus.
Targets(IC50)	Apoptosis, Bcl-2 Family
In vitro	Bz-423 triggers the activation of Bax and Bak without concurrently activating ASK1/JNK in Ramos cells[2]. The induction of apoptosis by Bz-423 in Ramos cells relies on superoxide, and it elicits a heightened superoxide response in these cells, resulting in the swift demise of Ramos B cells. In MEFs, Bz-423 rapidly elevates superoxide levels within 1 hour, with the extent of the increase depending on the concentration. In Ramos cells, Bz-423-induced superoxide generation instigates the activation of Bax and Bak, mediated by alterations in Mcl-1 expression and the functional activation of BH3-only proteins[1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (181.44 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.48 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.268 mL	11.3399 mL	22.6799 mL
5 mM	0.4536 mL	2.268 mL	4.536 mL
10 mM	0.2268 mL	1.134 mL	2.268 mL
50 mM	0.0454 mL	0.2268 mL	0.4536 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Blatt NB, et al. Bz-423 superoxide signals apoptosis via selective activation of JNK, Bak, and Bax. Free Radic Biol Med. 2008 Nov 1;45(9):1232-42.

Blatt NB, et al. Bz-423 superoxide signals B cell apoptosis via Mcl-1, Bak, and Bax. Biochem Pharmacol. 2009 Oct 15;78(8):966-73.

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