

SJG-136

## Chemical Properties

CAS No. :	232931-57-6
Formula:	C31H32N4O6
Molecular Weight:	556.61
Storage:	Keep away from direct sunlight,Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

## Biological Description

Description	SJG-136 is a DNA cross-linking agent with an XL50 value of 45 nM for pBR322 DNA. SJG-136 demonstrates potent antitumor activity and is applicable to investigations involving DNA cross-link formation, genomic damage responses, and tumor-associated cellular stress pathways.
Targets(IC50)	ADC Cytotoxin
In vitro	SJG-136 is cytotoxic to ovarian cell lines, such as A2780 (IC50: 22.5 pM), A2780cisR (IC50: 24 pM), CH1 (IC50: 0.12 nM), CH1cisR (IC50: 0.6 nM), and SKOV-3 (IC50: 9.1 nM). SJG-136 also reduces the viability of a panel of canine cancer cells (GI50: ranging from 0.33 - >100 nM after a 1 h exposure, and <0.03 - 17.33 nM following continuous exposure) [1] [2].
In vivo	SJG-136-induced H2AX phosphorylation correlates well, albeit with lower sensitivity, compared to foci measurement. At a dosage of 0.30 mg/kg, SJG-136 exhibits a stronger antitumor effect on CMeC-1 tumors in mice than at 0.15 mg/kg, regardless of whether it is given as a single dose or once weekly for three weeks through intravenous administration [2].

## Solubility Information

Solubility	DMSO: 26.66 mg/mL (47.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.7966 mL	8.983 mL	17.9659 mL
5 mM	0.3593 mL	1.7966 mL	3.5932 mL
10 mM	0.1797 mL	0.8983 mL	1.7966 mL
50 mM	0.0359 mL	0.1797 mL	0.3593 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

Gregson SJ, et al. Design, synthesis, and evaluation of a novel pyrrolobenzodiazepine DNA-interactive agent with highly efficient cross-linking ability and potent cytotoxicity. *J Med Chem.* 2001 Mar 1;44(5):737-48.

Mellinas-Gomez M, et al. Activity of the DNA minor groove cross-linking agent SG2000 (SJG-136) against canine tumours. *BMC Vet Res.* 2015 Aug 19;11:215.

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