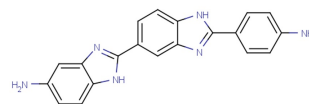


Ro 90-7501

Chemical Properties

CAS No.:	293762-45-5
Formula:	C20H16N6
Molecular Weight:	340.38
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Ro 90-7501 is an amyloid β 42 fibril assembly inhibitor (EC50: 2 μ M). Ro 90-7501 inhibits ATM phosphorylation and DNA repair. Ro 90-7501 also inhibits PP5 in a TPR-dependent manner. RO 90-7501 selectively enhances TLR3 and RLR ligand-induced IFN- β gene expression and antiviral response.
Targets(IC ₅₀)	Amyloid β 42;ATM;Protein phosphatase 5;Apoptosis: None
In vitro	Ro 90-7501 inhibits the phosphorylation of ATM and its downstream proteins, such as H2AX, Chk1, and Chk2, after irradiation. Ro 90-7501 significantly enhances radiosensitivity compared with control HeLa and ME-180 cells and it also significantly increases apoptosis and impaired cell cycle after irradiation. RO 90-7501, itself affects neither IFN- β nor NF κ B promoter activity, but significantly enhances poly I:C-induced IFN- β promoter activation and inhibits the activation of NF κ B in a dose-dependent manner. Treatment of cells with RO 90-7501 significantly enhances the antiviral activity of poly I:C [1][2].
In vivo	Ro 90-7501 (5 μ g/g; intraperitoneal injection; daily; for 21 days; female BALB/c nude mice) treatment significantly delays tumor growth. It also obviously reduces tumor volume[1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.938 mL	14.689 mL	29.379 mL
5 mM	0.588 mL	2.938 mL	5.876 mL
10 mM	0.294 mL	1.469 mL	2.938 mL
50 mM	0.059 mL	0.294 mL	0.588 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Tamari K, et al. Ro 90-7501 Is a Novel Radiosensitizer for Cervical Cancer Cells that Inhibits ATM Phosphorylation. *Anticancer Res.* 2019 Sep;39(9):4805-4810.
2. Guo F, et al. RO 90-7501 enhances TLR3 and RLR agonist induced antiviral response. *PLoS One.* 2012;7(10):e42583.
3. Hong TJ, et al. Ro 90-7501 inhibits PP5 through a novel, TPR-dependent mechanism. *Biochem Biophys Res Commun.* 2017 Jan 8;482(2):215-220.
4. Bohrmann B, et al. Self-assembly of beta-amyloid 42 is retarded by small molecular ligands at the stage of structural intermediates. *J Struct Biol.* 2000 Jun;130(2-3):232-46.

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