

JG-231

Chemical Properties

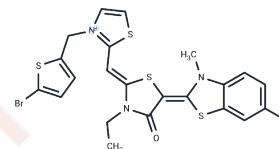
CAS No. : 1627126-59-3

Formula: C₂₂H₁₈BrCl₂N₃O₃S₄

Molecular Weight: 619.47

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	JG-231 is a JG-98 analog with anticancer activity. JG-231 inhibits the MDA-MB-231 xenograft tumor model of triple-negative breast cancer (TNBC). JG-231 inhibits the interaction of Hsp70-BAG3. JG-231 inhibits the MDA-MB-231 xenograft tumor model of triple-negative breast cancer (TNBC). JG-231 inhibits MDA-MB-231 xenograft tumor model of triple negative breast cancer (TNBC).
Targets(IC50)	Apoptosis, HSP
In vivo	JG-231 (2, 4 mg/kg; administered intraperitoneally) effectively suppressed the growth of A375, A375-PLX/R, and Colo829 xenografts in athymic nude mice without causing significant body weight loss. JG231-treated tumors exhibited increased lamin A cleavage and p21CIP1 expression. Moreover, JG231-treated tumors also exhibited increased MEK1/2 phosphorylation.[3]

Solubility Information

Solubility	DMSO: 1.8 mg/mL (2.91 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6143 mL	8.0714 mL	16.1428 mL
5 mM	0.3229 mL	1.6143 mL	3.2286 mL
10 mM	0.1614 mL	0.8071 mL	1.6143 mL
50 mM	0.0323 mL	0.1614 mL	0.3229 mL

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

Shao H, et al. Exploration of Benzothiazole Rhodacyanines as Allosteric Inhibitors of Protein-Protein Interactions with Heat Shock Protein 70 (Hsp70). *J Med Chem.* 2018;61(14):6163-6177.

Hong SK, et al. Analogs of the Heat Shock Protein 70 Inhibitor MKT-077 Suppress Medullary Thyroid Carcinoma Cells. *Int J Mol Sci.* 2022;23(3):1063.

Wu PK, et al. Mortalin (HSPA9) facilitates BRAF-mutant tumor cell survival by suppressing ANT3-mediated mitochondrial membrane permeability. *Sci Signal.* 2020;13(622):eaay1478.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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