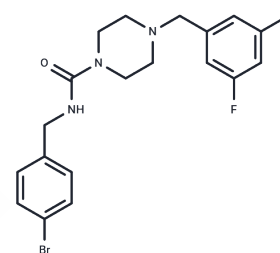


ZK53

Chemical Properties

CAS No. : 3031789-26-8
 Formula: C₁₉H₂₀BrF₂N₃O
 Molecular Weight: 424.28
 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	ZK53 is a selective and potent activator of mitochondrial casein hydrolase protease P (HsClpP). ZK53 induces apoptosis and inhibits the hydrolysis of alpha-casein by HsClpP. ZK53 inhibits tumour growth in xenografts and native mouse models.
Targets(IC50)	Others, Mitochondrial Metabolism

Solubility Information

Solubility	DMSO: 80 mg/mL (188.55 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: 5 mg/mL (11.78 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

	1mg	5mg	10mg
1 mM	2.3569 mL	11.7847 mL	23.5693 mL
5 mM	0.4714 mL	2.3569 mL	4.7139 mL
10 mM	0.2357 mL	1.1785 mL	2.3569 mL
50 mM	0.0471 mL	0.2357 mL	0.4714 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

Zhou LL, et al. Selective activator of human ClpP triggers cell cycle arrest to inhibit lung squamous cell carcinoma. Nat Commun. 2023 Nov 3;14(1):7069.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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