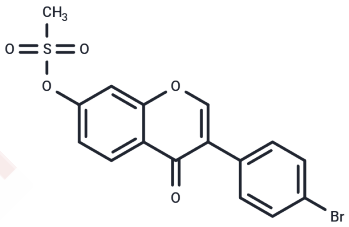
Data Sheet (Cat.No.T11760)

KIN101

Chemical Properties



CAS No. : 610753-87-2

Formula: C16H11BrO5S

Molecular Weight: 395.22

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	KIN101 (3-(4-Bromophenyl)-7-[(methylsulfonyl)oxy]-4-oxo-4H-chromene), an isoflavone agonist of IRF-3 dependent signaling, induces IRF-3 nuclear translocation. KIN101 has antiviral activity against RNA viruses, HCV, and RSV.
Targets(IC50)	Anti-infection,HCV Protease,Antifection,Influenza Virus,RSV
In vitro	KIN101 results in a significant increase in the levels of ISGs as well as other proteins downstream of IRF activation such as RIG-I and MDA5[1].KIN101 (10 μM; 24 hours) causes a significant decrease in the NP protein abundance[1]. KIN 101 (10 μM; 18 hours) shows a >1 log decrease in HCV RNA levels. KIN 101 (5, 10, 20, 50 μM; 4 hours) causes a dose-dependent decrease in influenza virus infection in MRC5 cells[1]. KIN101 (0.01, 0.1, 1, 10, 100 μM) has a significant and dose-dependent effect on the formation of foci and has an IC50 of 0.2 μM[1].

Solubility Information

Solubility	DMSO: 32 mg/mL (80.97 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (5.06 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5302 mL	12.6512 mL	25.3024 mL
5 mM	0.506 mL	2.5302 mL	5.0605 mL
10 mM	0.253 mL	1.2651 mL	2.5302 mL
50 mM	0.0506 mL	0.253 mL	0.506 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

Bedard KM, et al. Isoflavone agonists of IRF-3 dependent signaling have antiviral activity against RNA viruses. J Virol. 2012 Jul;86(13):7334-44.
Shawn P. Iadonato, et al. Anti-viral compounds, pharmaceutical compositions and methods of use thereof. US20160122312A1.