Data Sheet (Cat.No.T21704)

TargetMol

5-fluoro 203

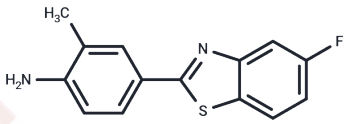
Chemical Properties

CAS No. : 260443-89-8

Formula: C14H11FN2S

Molecular Weight: 258.31

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	5-fluoro 203 (NSC-703786) is a cytotoxic molecule leading to cell death by forming DNA adducts. 5-fluoro 203 induces aryl hydrocarbon receptor signaling, and elevates expression of CYP1A1. 5-fluoro 203 treatment of cells also leads to elevation of reactive oxygen species and activation of p38, JNK and ERK.
Targets(IC50)	Others,Aryl Hydrocarbon Receptor
In vitro	Estrogen receptor positive (ER+; MCF-7 and T47D) breast cancer cells, estrogen receptor negative (ER?; CRL2335, MDA-MB-231, and MDA-MB-468) breast cancer cells, and nonmalignant MCF-10A cells are treated with 5F 203 or vehicle control (0.1% DMSO) for 72 h. Nonmalignant MCF-10A breast epithelial cells and MDA-MB-231 breast cancer cells were resistant to 5F 203 treatment, whereas the other cell lines showed varying sensitivity to 5F 203.

Solubility Information

Solubility	DMSO: 25 mg/mL (96.78 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: 2 mg/mL (7.74 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	3.8713 mL	19.3566 mL	38.7132 mL
5 mM	0.7743 mL	3.8713 mL	7.7426 mL
10 mM	0.3871 mL	1.9357 mL	3.8713 mL
50 mM	0.0774 mL	0.3871 mL	0.7743 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

Mclean L S , Watkins C N , Campbell P , et al. Aryl Hydrocarbon Receptor Ligand 5F 203 Induces Oxidative Stress That Triggers DNA Damage in Human Breast Cancer Cells[J]. Chemical Research in Toxicology, 2015, 28(5):855-71.