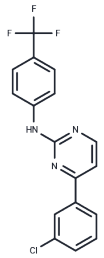
Data Sheet (Cat.No.T13276)

TargetMol

VAF347

Chemical Properties



CAS No. : 574759-62-9

Formula: C17H11ClF3N3

Molecular Weight: 349.74

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	VAF347 is a cell-permeable and highly affinity agonist of the aryl hydrocarbon receptor (AhR) with anti-inflammatory effects.
Targets(IC50)	Aryl Hydrocarbon Receptor
In vitro	In HL-60 cells, VAF347 augments retinoic acid-induced expression of AhR, Lyn, Vav1, and c-Cbl as well as p47phox. Several interactions of the partners in the signal body appear to be enhanced: Fgr interacts with c-Cbl, CD38, and pS259c-Raf, and AhR interacts with c-Cbl and Lyn[1]. VAF347 enhances retinoic acid-induced cell cycle arrest [1].
In vivo	AhR-deficient mice are resistant to VAF347's ability to block allergic lung inflammation in vivo[2].

Solubility Information

Solubility	DMSO: 17.85 mg/mL (51.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1.5 mg/mL (4.29 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	2.8593 mL	14.2963 mL	28.5927 mL
5 mM	0.5719 mL	2.8593 mL	5.7185 mL
10 mM	0.2859 mL	1.4296 mL	2.8593 mL
50 mM	0.0572 mL	0.2859 mL	0.5719 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

Ibabao CN, et al. The AhR agonist VAF347 augments retinoic acid-induced differentiation in leukemia cells. FEBS Open Bio. 2015 Apr 8;5:308-18.

B Paige Lawrence, et al. Activation of the aryl hydrocarbon receptor is essential for mediating the anti-inflammatory effects of a novel low-molecular-weight compound. Blood. 2008 Aug 15;112(4):1158-65.