Data Sheet (Cat.No.T10312)

TargetMol

Ampkinone

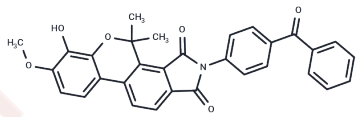
Chemical Properties

CAS No. : 1233082-79-5

Formula: C31H23NO6

Molecular Weight: 505.52

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	Ampkinone is an indirect AMPK activator.
Targets(IC50)	AMPK
In vitro	Ampkinone promotes AMPK phosphorylation through an LKB1-dependent mechanism, enhancing glucose absorption in muscle cells. This activation occurs indirectly in several cell lines, leading to increased glucose uptake.
In vivo	Ampkinone treatment in DIO mice results in significant reductions in total body weight and overall fat mass, effectively improving metabolic abnormalities in this model.

Solubility Information

Solubility	DMSO: 50 mg/mL (98.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9782 mL	9.8908 mL	19.7816 mL
5 mM	0.3956 mL	1.9782 mL	3.9563 mL
10 mM	0.1978 mL	0.9891 mL	1.9782 mL
50 mM	0.0396 mL	0.1978 mL	0.3956 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

Oh S, et al. Antidiabetic and antiobesity effects of Ampkinone (6f), a novel small molecule activator of AMP-activated protein kinase. J Med Chem. 2010 Oct 28;53(20):7405-13.