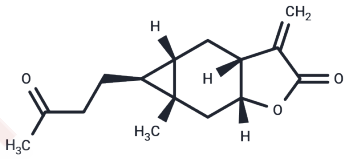
Data Sheet (Cat.No.TN1114)

TargetMol

Carabrone

Chemical Properties



CAS No. :	1748-81-8
Formula:	C15H20O3
Molecular Weight:	248.32
Storage:	Keep away from moisture,Keep away from direct sunlight 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	Carabrone, a botanical bicyclic sesquiterpenic lactone, is a promising fungicidal agent that can effectively control G. tritici.
Targets(IC50)	Antibacterial,Antifection
In vitro	To continuously improve the potential utility of the natural lead compound of Carabrone in agrochemistry, Carabrone oxime and 36 novel oxime ester derivatives of Carabrone modified at C(4) were synthesized, and evaluated for their antifungal activities against Botrytis cinerea in vitro and in vivo[1]

Solubility Information

Solubility	DMSO: 60 mg/mL (241.62 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble) (< 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 (20.14 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	4.0271 mL	20.1353 mL	40.2706 mL
5 mM	0.8054 mL	4.0271 mL	8.0541 mL
10 mM	0.4027 mL	2.0135 mL	4.0271 mL
50 mM	0.0805 mL	0.4027 mL	0.8054 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

Wang D, et al. Semisynthesis and antifungal activity of novel oxime ester derivatives of carabrone modified at C(4) against Botrytis cinerea. Chem Biodivers. 2014 Jun;11(6):886-903.
Wang M, et al. A functional analysis of mitochondrial respiratory chain cytochrome bc1 complex in Gaeumannomyces tritici by RNA silencing as a possible target of carabrone. Mol Plant Pathol. 2020 Dec;21(12):1529-1544.