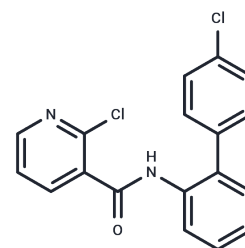


Boscalid

Chemical Properties

CAS No. :	188425-85-6
Formula:	C ₁₈ H ₁₂ Cl ₂ N ₂ O
Molecular Weight:	343.21
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	Boscalid is a broad-spectrum carboxamide fungicide that inhibits fungal respiration by binding to the ubiquinone site of mitochondrial complex II/succinate dehydrogenase.
Targets(IC50)	Mitochondrial Metabolism,Antifungal
In vitro	In field studies, boscalid applied at 5.6 µg/cm ² provides 55.5 and 30.4% disease control for lettuce drops caused by <i>S. minor</i> and <i>S. sclerotiorum</i> , respectively. Boscalid suppresses mycelial growth of <i>S. minor</i> by 87 to 100% and of <i>S. sclerotiorum</i> by 77 to 100% when used at a concentration of 1 µg/ml[2].

Solubility Information

Solubility	Methanol: Slightly soluble DMSO: 250 mg/mL (728.42 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (29.14 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (29.14 mM),Solution. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9137 mL	14.5683 mL	29.1367 mL
5 mM	0.5827 mL	2.9137 mL	5.8273 mL
10 mM	0.2914 mL	1.4568 mL	2.9137 mL
50 mM	0.0583 mL	0.2914 mL	0.5827 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 Y, et al. A new point mutation in the iron-sulfur subunit of succinate dehydrogenase confers resistance to boscalid in *Sclerotinia sclerotiorum*. *Mol Plant Pathol*. 2015 Sep;16(7):653-61.

Matheron ME, Porchas M. Activity of Boscalid, Fenhexamid, Fluazinam, Fludioxonil, and Vinclozolin on Growth of *Sclerotinia minor* and *S. sclerotiorum* and Development of Lettuce Drop. *Plant Dis*. 2004 Jun;88(6):665-668.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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