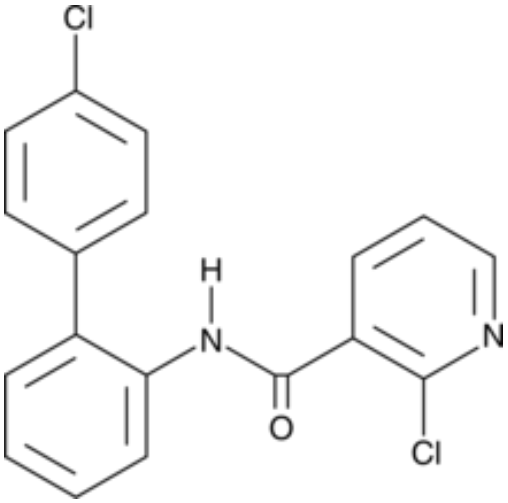
Product Data Sheet

Product Name: Boscalid
Cat. No.: GC46943

Chemical Properties

Cas. No.	188425-85-6		
SMILES	ClC1=CC=C(C2=CC=CC=C2NC(C3=C(Cl)N=CC=C3)=O)C=C1		
Formula	C18H12Cl2N2O	M.Wt	343.2
Solubility	DMSO : 100 mg/mL (291.37 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Boscalid is a broad-spectrum carboxamide fungicide that inhibits fungal respiration by binding to the ubiquinone site of mitochondrial complex II/succinate dehydrogenase.[1] It suppresses mycelial growth of *S. minor* by 87 to 100% and of *S. sclerotiorum* by 77 to 100% when used at a concentration of 1 µg/ml.[2] In field studies, boscalid applied at 5.6 µg/cm^2 provides 55.5 and 30.4% disease control for lettuce drop caused by *S. minor* and *S. sclerotiorum*, respectively. It decreases

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cell viability of mouse primary cortical neurons following long-term exposure but is not cytotoxic (LC_{50} = >100 µM for acute and continuous exposure). Formulations containing boscalid have been used in agriculture to prevent fungal growth on crops.

1.Wang, Y., Duan, Y., Wang, J., et al.A new point mutation in the iron-sulfur subunit of succinate dehydrogenase confers resistance to boscalid in Sclerotinia sclerotiorumMol. Plant Pathol.16(7)653-661(2015) 2.Matheron, M.E., and Porchas, M.Activity of boscalid, fenhexamid, fluazinam, fludioxonil, and vinclozolin on growth of Sclerotinia minor and S. sclerotiorum and development of lettuce dropPlant Dis.88(6)665-668(2004)

Caution: Product has not been fully validated for medical applications. For research use only.
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