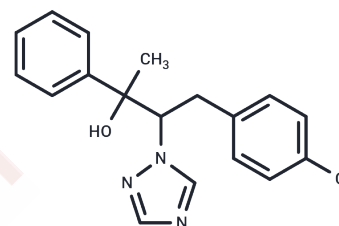


(Rac)-Brassinazole

Chemical Properties

CAS No. :	224047-41-0
Formula:	C ₁₈ H ₁₈ ClN ₃ O
Molecular Weight:	327.81
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	(Rac)-Brassinazole are a class of phytohormones with essential roles in plant growth and development, including the promotion of stem elongation and cell division. Brassinazole is a triazole-type brassinosteroid biosynthesis inhibitor.
Targets(IC50)	Cytochromes P450
In vitro	Brassinazole is a specific BR biosynthesis inhibitor. Brassinazole-treated cress also showed dwarfism, with altered leaf morphology, including the downward curling and dark green color typical of Arabidopsis BR-deficient mutants, and this dwarfism was reversed by the application of 10 nM brassinolide. This result suggests that BRs are essential for plant growth, and that brassinazole can be used to clarify the function of BRs in plants as a complement to BR-deficient mutants.

Solubility Information

Solubility	DMSO: 120 mg/mL (366.07 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (30.51 mM),Suspension. 10% DMSO+90% Corn Oil: 0.5 mg/mL (1.53 mM),Sonication is recommended. 10% DMSO+90% Corn oil: < 10 mg/mL (30.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Saline: < 10 mg/mL (30.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (30.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. <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	3.0505 mL	15.2527 mL	30.5055 mL
5 mM	0.6101 mL	3.0505 mL	6.1011 mL
10 mM	0.3051 mL	1.5253 mL	3.0505 mL
50 mM	0.061 mL	0.3051 mL	0.6101 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

Asami T , Min Y K , Nagata N , et al. Characterization of brassinazole, a triazole-type brassinosteroid biosynthesis inhibitor.[J]. Plant Physiology, 2000, 123(1):93.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481