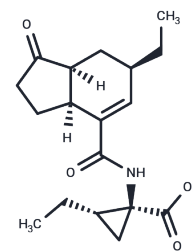


Coronatine

Chemical Properties

CAS No. :	62251-96-1
Formula:	C ₁₈ H ₂₅ NO ₄
Molecular Weight:	319.4
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Coronatine is a toxin and plant growth regulator produced by a bacterium, <i>Pseudomonas syringae</i> , which is structurally similar to jasmonic acid and is able to bind and activate the jasmonic acid receptor, COI1, to inhibit salicylic acid-dependent defense responses; it is also able to promote bacterial invasion and reproduction through stomata.
Targets(IC50)	Others, Antibacterial
In vitro	Methods: Plants were grown on vertical MS plates for 12 days and then transferred to MS plates containing ABA (5 μM) and coronatine (1 μM) or no other chemicals as controls. Rosette leaves were collected 24 hours later for RNA extraction. Results: Coronatine induced the expression of NAC transcription factor genes (ANAC019, ANAC055, and ANAC072), inhibited abscisic acid-induced stomatal closure, promoted stomatal reopening, and inhibited the accumulation of salicylic acid, thereby weakening the plant's immune response. [1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1309 mL	15.6544 mL	31.3087 mL
5 mM	0.6262 mL	3.1309 mL	6.2617 mL
10 mM	0.3131 mL	1.5654 mL	3.1309 mL
50 mM	0.0626 mL	0.3131 mL	0.6262 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

Zheng XY, et al. Coronatine promotes *Pseudomonas syringae* virulence in plants by activating a signaling cascade that inhibits salicylic acid accumulation. *Cell Host Microbe*. 2012 Jun 14;11(6):587-96.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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