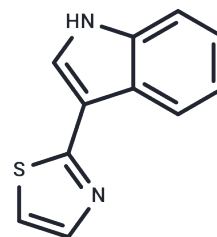


Camalexin

Chemical Properties

CAS No. :	135531-86-1
Formula:	C ₁₁ H ₈ N ₂ S
Molecular Weight:	200.26
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Camalexin is a phytoalexin isolated from <i>Camelina sativa</i> . It has antifungal, antibacterial, antiproliferative, and anticancer activities. Camalexin can induce ROS production.
Targets(IC50)	Reactive Oxygen Species,ROS,Antibacterial,Antifungal
In vitro	Camalexin shows antiproliferative activity against a human breast cancer cell line. For the oomycetes, <i>Phytophthora</i> and <i>Pythium</i> Nep1-like proteins are the initial triggers of Camalexin synthesis and formation of ROS. ROS appear to be of general relevance for Camalexin formation. In a screen for enhanced susceptibility to <i>Alternaria brassicicola</i> the <i>esa1</i> mutant is identified, which shows delayed Camalexin induction. Particularly in response to ROS inducing agents reduced Camalexin levels are synthesized. This crucial role for ESA1 is confirmed by the inability of <i>esa1</i> mutants to synthesize Camalexin in response to <i>Leptosphaeria maculans</i> [2].

Solubility Information

Solubility	DMSO: 120 mg/mL (599.22 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.9935 mL	24.9675 mL	49.9351 mL
5 mM	0.9987 mL	4.9935 mL	9.987 mL
10 mM	0.4994 mL	2.4968 mL	4.9935 mL
50 mM	0.0999 mL	0.4994 mL	0.9987 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.

Reference

William A.Ayer, et al. Synthesis of camalexin and related phytoalexins. Tetrahedron. Volume 48, Issue 14, 1992, Pages 2919-2924.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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