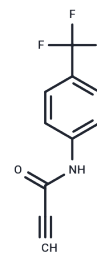


SDH-IN-2

Chemical Properties

CAS No. :	1823354-06-8
Formula:	C ₁₀ H ₆ F ₃ NO
Molecular Weight:	213.16
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	SDH-IN-2, a potent succinate dehydrogenase (SDH) inhibitor with an IC ₅₀ of 0.55 µg/mL, demonstrates antifungal activity against plant pathogenic fungi, with EC ₅₀ values ranging from 3.82 to 9.81 µg/mL.
Targets(IC ₅₀)	Antifungal
In vitro	SDH-IN-2 (Compound 13) (200 µg/mL; 7 days) completely inhibited <i>Physalospora piricola</i> infection in apples and demonstrated a high inhibition rate of 70.9-86.9% against all fungi even at 20 µg/mL.[1] The EC ₅₀ values for inhibiting <i>P. oryza</i> and <i>F. oxysporum</i> f. sp. <i>niveum</i> were 4.33 and 3.56 µg/mL, respectively.[1] SDH-IN-2 (0-50 µg/mL) showed no effect on bean seed germination rate, and SDH-IN-2 (0-100 µg/mL) had no significant effect on the growth of wheat seedlings.[1] The compound inhibits SDH enzyme activity with an IC ₅₀ of 0.55 µg/mL and binds well to the ubiquinone binding region of SDH through hydrogen bonds, forming π-alkyl and π-cation interactions.[1] SDH-IN-2 (0-200 µg/mL; 7 days) inhibits <i>P. piricola</i> infection on apples. [1]

Solubility Information

Solubility	DMSO: 50 mg/mL (234.57 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	4.6913 mL	23.4566 mL	46.9131 mL
5 mM	0.9383 mL	4.6913 mL	9.3826 mL
10 mM	0.4691 mL	2.3457 mL	4.6913 mL
50 mM	0.0938 mL	0.4691 mL	0.9383 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

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