

Product Data Sheet

Product Name: SDH-IN-2

Cat. No.: GC71067

Chemical Properties

Cas. No. 1823354-06-8

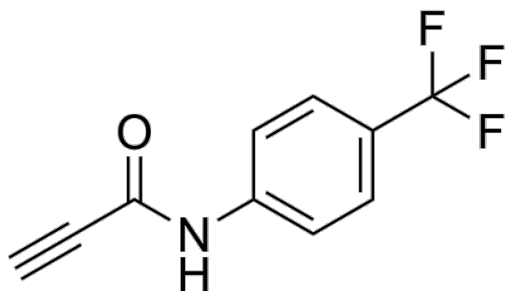
Formula $C_{10}H_6F_3NO$ M.Wt 213.16

Solubility DMSO : 250 mg/mL (1172.83 mM); Storage -20°C
Need ultrasonic; Hygroscopic DMSO has a significant impact on the solubility of product, please use newly opened DMSO)

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

SDH-IN-2 is a potent succinate dehydrogenase (SDH) inhibitor with an IC₅₀ of 0.55 µg/mL. SDH-IN-2 is also an antifungal agent. SDH-IN-2 inhibits phytopathogenic fungia with average EC₅₀ values of 3.82-9.81 µg/mL for all the fungi. SDH-IN-2 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing

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

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Azide groups.

SDH-IN-2 (Compound 13) (200 µg/mL, 7 days) completely inhibits *Physalospora piricola* infection on apples, and also shows high inhibition rates of 70.9-86.9% on all the fungi even at 20 µg/mL^[1].

SDH-IN-2 inhibits *P. oryza* and *F. oxysporum* f. sp. *niveum* with EC₅₀s of 4.33 and 3.56 µg/mL^[1].

SDH-IN-2 (0-50 µg/mL) has no effect on the germination rate of bean seeds^[1].

SDH-IN-2 (0-100 µg/mL) has no significant effect on the growth of wheat seedlings^[1].

SDH-IN-2 inhibits SDH enzymatic activity with an IC₅₀ of 0.55 µg/mL^[1].

SDH-IN-2 binds well to the ubiquinone-binding region of SDH by hydrogen bonds and undergoes π-alkyl interaction and π-cation interaction^[1].

SDH-IN-2 (Compound 13) (0-200 µg/mL, 7 days) inhibits the infection of *P. piricola* on apples^[1].

References:

[1]. Zhang YH, et al. Discovery of N-Phenylpropiolamide as a Novel Succinate Dehydrogenase Inhibitor Scaffold with Broad-Spectrum Antifungal Activity on Phytopathogenic Fungi. *J Agric Food Chem.* 2023 Mar 1;71(8):3681-3693.

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