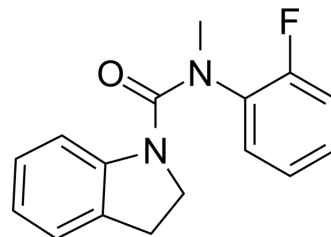


SL antagonist 1

Cat. No.:	HY-162421
Molecular Formula:	C ₁₆ H ₁₅ FN ₂ O
Molecular Weight:	270.3
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SL antagonist 1 (Compound D12) is strigolactones antagonists and can strongly interact with SL receptor proteins. SL antagonist 1 can combat root-parasitic weed infestations. SL antagonist 1 has no side effects on the germination or seedling growth ^[1] .
In Vitro	<p>SL antagonist 1 (0-320 μM; 11-17 d), together with GR24 (HY-129038) is found can reduce the germination rate of parasitic weed seeds of <i>Phelipanche aegyptiaca</i> and <i>Striga Yorktica</i>^[1].</p> <p>SL antagonist 1 (0-10 μM; 7 with wild or Max2-1 mutant <i>Arabidopsis thaliana</i>, is found to promote hypodermal cell elongation at lower concentrations, suggesting that it has the potential to act as an inhibitor of SL receptors. SL antagonist 1 also attenuates the inhibitory effect of GR24 (HY-129038) on hypodermal cell elongation, suggesting its role in altering SL-mediated physiological responses^[1].</p> <p>SL antagonist 1SL has a stronger binding affinity to SL receptor protein ShHTL7 and higher affinity to <i>Arabidopsis thaliana</i> D14 than KK094^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Lin D et al. Design, Synthesis, and Bioactivities of N-Heterocyclic Ureas as Strigolactone Response Antagonists against Parasitic-Weed Seed Germination J Agric Food Chem. 2024 Apr.

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

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