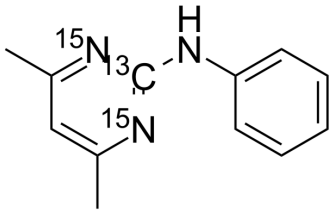
Pyrimethanil-13C,15N2

Cat. No.:	HY-B2033S
Molecular Formula:	$C_{11}{}^{13}CH_{13}N^{15}N_2$
Molecular Weight:	202.23
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pyrimethanil-13C,15N2 is the 13C-labeled and 15N-labeled Pyrimethanil. Pyrimethanil is an anilinopyrimidine and broad-spectrum contact fungicide for the control of Botrytis spp. on a wide variety of crops[1]. Pyrimethanil inhibits the biosynthesis of methionine and other amino acids in Botrytis cinerea. Pyrimethanil can be used for the research of fungal diseases prevention on fruit, vegetable and ornamental plants with mold infection[3].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Richard J. Milling, et al. Mode of action of the anilino-pyrimidine fungicide pyrimethanil. 2. Effects on enzyme secretion in Botrytis cinerea. Volume45, Issue1, September 1995.

[3]. Salvatore D'Aquino, et al. Residue levels and effectiveness of pyrimethanil vs imazalil when using heated postharvest dip treatments for control of Penicillium decay on citrus fruit. J Agric Food Chem. 2006 Jun 28;54(13):4721-6.

[4]. L Kanetis, et al. Characterization of genetic and biochemical mechanisms of fludioxonil and pyrimethanil resistance in field isolates of Penicillium digitatum. Phytopathology

[5]. Petr Masner, et al. Possible methionine biosynthesis inhibition by pyrimidinamine fungicides. Pesticide Science

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA