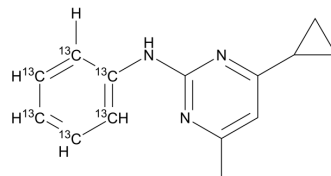


Cyprodinil-¹³C₆

Cat. No.:	HY-116214S1
CAS No.:	1773496-63-1
Molecular Formula:	C ₈ ¹³ C ₆ H ₁₅ N ₃
Molecular Weight:	231.24
Target:	Fungal; Androgen Receptor; Isotope-Labeled Compounds
Pathway:	Anti-infection; Vitamin D Related/Nuclear Receptor; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	<p>Cyprodinil-¹³C₆ is the ¹³C₆ labeled Cyprodinil. Cyprodinil is an anilinopyrimidine broad-spectrum fungicide that inhibits the biosynthesis of methionine in phytopathogenic fungi. Cyprodinil inhibits mycelial cell growth of <i>B. cinerea</i>, <i>P. herpotrichoides</i>, and <i>H. oryzae</i> on amino acid-free media (IC₅₀s=0.44, 4.8, and 0.03 μM, respectively). Cyprodinil acts as an androgen receptor (AR) agonist (EC₅₀=1.91 μM) in the absence of the AR agonist DHT and inhibits the androgenic effect of DHT (IC₅₀=15.1 μM).</p>
In Vitro	<p>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.</p>

REFERENCES

- [1]. Frances Orton, et al. Widely used pesticides with previously unknown endocrine activity revealed as in vitro antiandrogens. *Environ Health Perspect.* 2011 Jun;119(6):794-800.
- [2]. Masner, P., et al. Possible methionine biosynthesis inhibition by pyrimidinamine fungicides. *Pestic. Sci.* 42(3),163-166 (1994).
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-216.

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

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