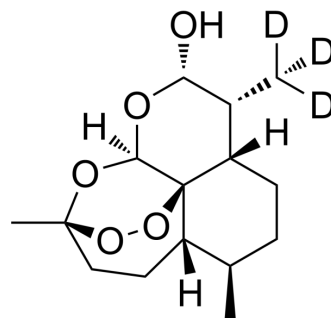


## Dihydroartemisinin-d<sub>3</sub>

<b>Cat. No.:</b>	HY-N0176S
<b>CAS No.:</b>	176774-98-4
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>21</sub> D <sub>3</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	287.37
<b>Target:</b>	Apoptosis; Autophagy; NF-κB; Parasite
<b>Pathway:</b>	Apoptosis; Autophagy; NF-κB; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Dihydroartemisinin-d <sub>3</sub> is the deuterium labeled Dihydroartemisinin. Dihydroartemisinin is a potent anti-malaria agent.
<b>IC<sub>50</sub> &amp; Target</b>	Plasmodium
<b>In Vitro</b>	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 <sup>[1]</sup> . 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]. Hu W, et al. Dihydroartemisinin induces autophagy by suppressing NF-κB activation. *Cancer Lett.* 2014 Feb 28;343(2):239-48.
- [3]. Li YJ, et al. Dihydroartemisinin accentuates the anti-tumor effects of photodynamic therapy via inactivation of NF-κB in Eca109 and Ec9706 esophageal cancer cells. *Cell Physiol Biochem.* 2014;33(5):1527-36.
- [4]. Li HJ, et al. Dihydroartemisinin-praziquantel combinations and multiple doses of dihydroartemisinin in the treatment of *Schistosoma japonicum* in experimentally infected mice. *Ann Trop Med Parasitol.* 2011 Jun;105(4):329-33.

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

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