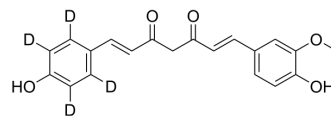


## Demethoxycurcumin-d<sub>4</sub>

<b>Cat. No.:</b>	HY-N0006S1												
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>14</sub> D <sub>4</sub> O <sub>5</sub>												
<b>Molecular Weight:</b>	342.38												
<b>Target:</b>	Apoptosis; Autophagy; Bacterial												
<b>Pathway:</b>	Apoptosis; Autophagy; Anti-infection												
<b>Storage:</b>	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
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	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (292.07 mM; Need ultrasonic)  
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Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mM	2.9207 mL	14.6037 mL
5 mM	0.5841 mL	2.9207 mL	5.8415 mL		
10 mM	0.2921 mL	1.4604 mL	2.9207 mL		

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Demethoxycurcumin-d<sub>4</sub> is the deuterium labeled Demethoxycurcumin. Demethoxycurcumin (Curcumin II) is a major active curcuminoid; possess anti-inflammatory properties[1].

#### 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[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Somchit M, et al. Demethoxycurcumin from *Curcuma longa* rhizome suppresses iNOS induction in an in vitro inflamed human intestinal mucosa model. *Asian Pac J Cancer Prev.* 2014;15(4):1807-10.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-223.

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

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