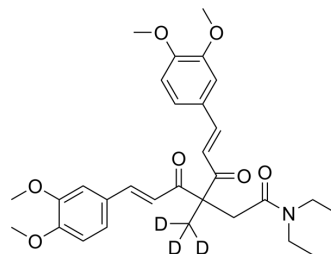


## TML-6-d<sub>3</sub>

<b>Cat. No.:</b>	HY-137315S
<b>CAS No.:</b>	2673270-28-3
<b>Molecular Formula:</b>	C <sub>30</sub> H <sub>34</sub> D <sub>3</sub> NO <sub>7</sub>
<b>Molecular Weight:</b>	526.64
<b>Target:</b>	Amyloid-β; Keap1-Nrf2; mTOR; NF-κB; Isotope-Labeled Compounds
<b>Pathway:</b>	Neuronal Signaling; NF-κB; PI3K/Akt/mTOR; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	TML-6-d <sub>3</sub> is the deuterium labeled TML-6. TML-6, an orally active curcumin derivative, inhibits the synthesis of the β-amyloid precursor protein and β-amyloid (Aβ). TML-6 can upregulate Apo E, suppress NF-κB and mTOR, and increase the activity of the anti-
<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 Feb;53(2):211-216.
- [2]. Ih-Jen Su, et al. A Curcumin Analog Exhibits Multiple Biologic Effects on the Pathogenesis of Alzheimer's Disease and Improves Behavior, Inflammation, and β-Amyloid Accumulation in a Mouse Model. *Int J Mol Sci*. 2020 Jul 30;21(15):5459.

**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