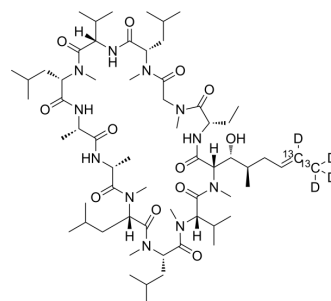


## Cyclosporin A-<sup>13</sup>C<sub>2</sub>,d<sub>4</sub>

<b>Cat. No.:</b>	HY-B0579S3
<b>Molecular Formula:</b>	C <sub>60</sub> <sup>13</sup> C <sub>2</sub> H <sub>107</sub> D <sub>4</sub> N <sub>11</sub> O <sub>12</sub>
<b>Molecular Weight:</b>	1208.62
<b>Target:</b>	Isotope-Labeled Compounds; Calcineurin
<b>Pathway:</b>	Others; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Cyclosporin A- <sup>13</sup> C <sub>2</sub> ,d <sub>4</sub> (Cyclosporine A- <sup>13</sup> C <sub>2</sub> ,d <sub>4</sub> ; Ciclosporin A- <sup>13</sup> C <sub>2</sub> ,d <sub>4</sub> ) is a <sup>13</sup> C labeled Cyclosporin A (HY-B0579) <sup>[1]</sup> . Cyclosporin A (Cyclosporine A) is an immunosuppressant which binds to the cyclophilin and inhibits phosphatase activity of protein phosphatase 2B (PP2B/calcineurin) with an IC <sub>50</sub> of 5 nM <sup>[2]</sup> . Cyclosporin A also inhibits CD11a/CD18 adhesion <sup>[3]</sup> .
<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):211-246.

**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