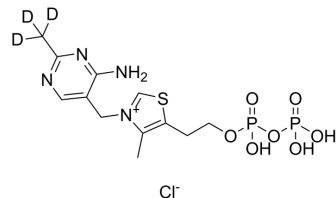


## Thiamine pyrophosphate-d<sub>3</sub>

<b>Cat. No.:</b>	HY-113076S
<b>CAS No.:</b>	2483831-79-2
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>16</sub> D <sub>3</sub> ClN <sub>4</sub> O <sub>7</sub> P <sub>2</sub> S
<b>Molecular Weight:</b>	463.79
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Thiamine pyrophosphate-d <sub>3</sub> is the deuterium labeled Thiamine pyrophosphate. Thiamine pyrophosphate is the coenzyme form of Vitamin B1 and is a required intermediate in the pyruvate dehydrogenase complex and the ketoglutarate dehydrogenase complex.
<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.

**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