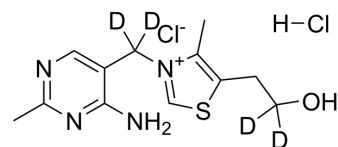


Thiamine-d₄ hydrochloride

Cat. No.:	HY-N0680S2
Molecular Formula:	C ₁₂ H ₁₄ D ₄ Cl ₂ N ₄ OS
Molecular Weight:	341.29
Target:	HBV; Apoptosis; Endogenous Metabolite
Pathway:	Anti-infection; Apoptosis; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Thiamine-d ₄ (hydrochloride) is deuterium labeled Thiamine (hydrochloride). Thiamine hydrochloride (Thiamine chloride hydrochloride) is an essential micronutrient needed as a cofactor for many central metabolic enzymes.
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 ^[1] . 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]. Moulin M, et al. Analysis of Chlamydomonas thiamin metabolism in vivo reveals riboswitch plasticity. *Proc Natl Acad Sci U S A*. 2013 Sep 3;110(36):14622-7.

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