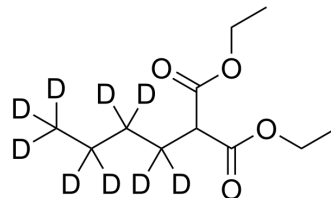


Diethyl butylmalonate-d₉

Cat. No.:	HY-44178S
CAS No.:	1189865-34-6
Molecular Formula:	C ₁₁ H ₁₁ D ₉ O ₄
Molecular Weight:	225.33
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Diethyl butylmalonate-d ₉ is the deuterium labeled Diethyl butylmalonate[1]. Diethyl butylmalonate exhibits toxicity to <i>T. pyriformis</i> , with a log(IC ₅₀ -1) of 0.557[2].
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 Feb;53(2):211-216.
- [2]. T I Netzeva, et al. Partial least squares modelling of the acute toxicity of aliphatic compounds to *Tetrahymena pyriformis*. *SAR QSAR Environ Res*. 2003 Aug;14(4):265-83.

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