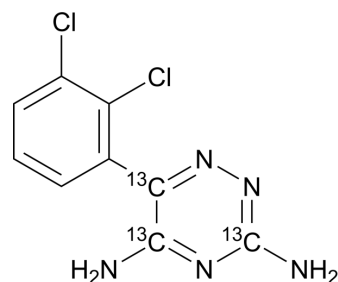


Lamotrigine-¹³C₃

Cat. No.:	HY-B0495S4
CAS No.:	1188265-38-4
Molecular Formula:	C ₆ ¹³ C ₃ H ₇ Cl ₂ N ₅
Molecular Weight:	259.07
Target:	Sodium Channel; Autophagy
Pathway:	Membrane Transporter/Ion Channel; Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Lamotrigine- ¹³ C ₃ is the ¹³ C-labeled Lamotrigine. Lamotrigine (BW430C) is a potent and orally active anticonvulsant or antiepileptic agent. Lamotrigine selectively blocks voltage-gated Na ⁺ channels, stabilizing presynaptic neuronal membranes and inhibiting glutamate release. Lamotrigine can be used for the research of epilepsy, focal seizure, et al[1][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 ^[3] MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. M J Leach, et al. Pharmacological studies on lamotrigine, a novel potential antiepileptic drug: II. Neurochemical studies on the mechanism of action. *Epilepsia*. Sep-Oct 1986;27(5):490-7.
- [2]. Damianka P Getova, et al. A study of the effects of lamotrigine on mice using two convulsive tests. *Folia Med (Plovdiv)*. Apr-Jun 2011;53(2):57-62.
- [3]. 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.

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