## **Product** Data Sheet

# Dodecyltrimethylammonium-d<sub>25</sub> bromide

**Cat. No.:** HY-D0838S **CAS No.:** 2309360-05-0

Molecular Formula:  $C_{15}H_9D_{25}BrN$ 

Molecular Weight: 333.5

Target: Isotope-Labeled Compounds

Pathway: Others

**Storage:** Please store the product under the recommended conditions in the Certificate of

Analysis.

Proteins

Inhibitors

**Screening Libraries** 

## **BIOLOGICAL ACTIVITY**

Description	Dodecyltrimethylammonium- $d_{25}$ (bromide) is the deuterium labeled Dodecyltrimethylammonium (bromide)[1]. Dodecyltrimethylammonium bromide (DTAB) is a surfactant. Dodecyltrimethylammonium bromide interacts with DNA and changes the mechanical properties of DNA on binding and the specific binding parameters of the interaction[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 <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):211-216.

[2]. E F Silva, et al. Dodecyltrimethylammonium bromide surfactant effects on DNA: Unraveling the competition between electrostatic and hydrophobic interactions.

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