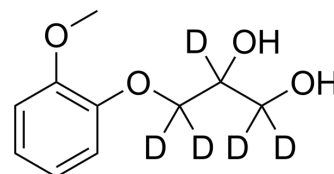


Guaifenesin-d5

Cat. No.:	HY-B0264S1
CAS No.:	1329563-41-8
Molecular Formula:	C ₁₀ H ₉ D ₅ O ₄
Molecular Weight:	203.25
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Guaifenesin-d5 (Guaiacol glyceryl ether-d5) is the deuterium labeled Guaifenesin. Guaifenesin (Guaiacol glyceryl ether), a constituent of guaiac resin from the wood of <i>Guajacum officinale</i> Linné, is an expectorant. Guaifenesin can alleviate cough discomfort by increasing sputum volume and decreasing its viscosity, thereby promoting effective cough. Guaifenesin also has narcotic effect ^{[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 ^[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]. Bennett, S., N. Hoffman, and M. Monga, Ephedrine- and guaifenesin-induced nephrolithiasis. *J Altern Complement Med*, 2004. 10(6): p. 967-9.
- [3]. Dicipinigaitis PV, et, al. Effect of guaifenesin on cough reflex sensitivity. *Chest*. 2003 Dec;124(6):2178-81.

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