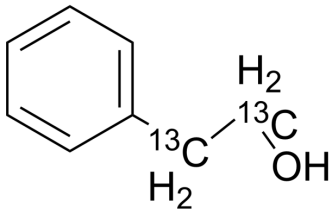
2-Phenylethanol-$^{13}C_2$

Cat. No.:	HY-B1290S3
CAS No.:	68661-17-6
Molecular Formula:	$C_6{}^{13}C_2H_{10}O$
Molecular Weight:	124.15
Target:	Bacterial; Virus Protease; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	2-Phenylethanol-$^{13}C_2$ is ^{13}C labeled β-Caryophyllene (HY-B1290). β-Caryophyllene is a CB2 receptor agonist.
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]. 2-Phenylethanol is used as an additive in cigarettes and a preservative in soaps[2]. 2-Phenylethanol exerts an inhibitory effect on the growth of Gram-negative microorganisms[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	2-Phenylethanol (5%; inhalation) increases anxiety-like behavior and decreases depression-like behavior in mice[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. M M W Etschmann, et al. Biotechnological production of 2-phenylethanol. Appl Microbiol Biotechnol. 2002 Jun;59(1):1-8.

[2]. Y.-J. Zhu et al. Antityrosinase and antimicrobial activities of 2-phenylethanol, 2-phenylacetaldehyde and 2-phenylacetic acid. Food Chemistry 124 (2011) 298-302.

[3]. Hiroshi Ueno, et al. Anti-depressive-like effect of 2-phenylethanol inhalation in mice. Biomed Pharmacother. 2019 Mar:111:1499-1506.

[4]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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