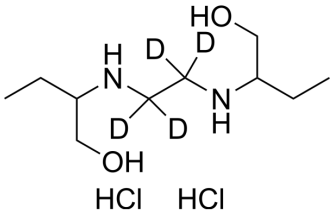
# Ethambutol-$d_4$ dihydrochloride

| | |
|---|---|
| **Cat. No.:** | HY-B0535AS |
| **Molecular Formula:** | $C_{10}H_{22}D_4Cl_2N_2O_2$ |
| **Molecular Weight:** | 281.26 |
| **Target:** | Antibiotic; Bacterial; Isotope-Labeled Compounds |
| **Pathway:** | Anti-infection; Others |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |




## BIOLOGICAL ACTIVITY

| | |
|---|---|
| **Description** | Ethambutol-$d_4$ dihydrochloride is deuterated labeled Ethambutol dihydrochloride (HY-B0535A). Ethambutol dihydrochloride is an antimycobacterial compound that prevents cell wall formation by inhibiting arabinosyltransferase activity. |
| **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].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |
| **In Vivo** | Ethambutol dihydrochloride can be used in animal modeling to build a model of hyperuricemia.<br><br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## REFERENCES

[1]. Ethambutol. Tuberculosis (Edinb), 2008. 88(2): p. 102-5.

[2]. Rastogi, N., V. Labrousse, and K.S. Goh, In vitro activities of fourteen antimicrobial agents against drug susceptible and resistant clinical isolates of Mycobacterium tuberculosis and comparative intracellular activities against the virulent H37Rv strain in human macrophages. Curr Microbiol, 1996. 33(3): p. 167-75.

[3]. Kaur, D. and G.K. Khuller, In vitro, ex-vivo and in vivo activities of ethambutol and sparfloxacin alone and in combination against mycobacteria. Int J Antimicrob Agents, 2001. 17(1): p. 51-5.

[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