Product Data Sheet

Alectinib-d8

Cat. No.: HY-13011S

CAS No.: 1256585-15-5

Molecular Formula: C₃₀H₂₆D₈N₄O₂

Molecular Weight: 490.67 Target: ALK

Pathway: Protein Tyrosine Kinase/RTK

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Alectinib-d8 (CH5424802-d8) is the deuterium labeled Alectinib. Alectinib (CH5424802) is a potent, selective, and orally available ALK inhibitor with an IC $_{50}$ of 1.9 nM and a K $_{d}$ value of 2.4 nM (in an ATP-competitive manner), and also inhibits ALK F1174L and ALK R1275Q with IC $_{50}$ s of 1 nM and 3.5 nM, respectively ^[1] . Alectinib demonstrates effective central nervous system (CNS) penetration ^[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]. Sakamoto H, et al. CH5424802, a selective ALK inhibitor capable of blocking the resistant gatekeeper mutant. Cancer Cell. 2011, 19(5), 679-690.

[3]. Gadgeel S, et al. Alectinib versus crizotinib in treatment-naive anaplastic lymphoma kinase-positive (ALK+) non-small-cell lung cancer: CNS efficacy results from the ALEX study. Ann Oncol. 2018 Nov 1;29(11):2214-2222.

Caution: Product has not been fully validated for medical applications. For research use only.

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