Product Data Sheet

Erlotinib-13C₆ hydrochloride

 Cat. No.:
 HY-12008S1

 CAS No.:
 1210610-07-3

 Molecular Formula:
 $C_{16}^{13}C_6H_{24}CIN_3O_4$

Molecular Weight: 435.85

Target: EGFR; Autophagy

Pathway: JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Autophagy

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Erlotinib- ¹³ C ₆ (hydrochloride) is the ¹³ C labeled Erlotinib Hydrochloride[1]. Erlotinib Hydrochloride (CP-358774 Hydrochloride) inhibits purified EGFR kinase with an IC50 of 2 nM[2]. Erlotinib-13C6 (hydrochloride) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.
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 Feb;53(2):211-216.

[2]. Moyer JD, et al. Induction of apoptosis and cell cycle arrest by CP-358,774, an inhibitor of epidermal growth factor receptor tyrosine kinase. Cancer Res. 1997 Nov 1;57(21):4838-48.

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

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