

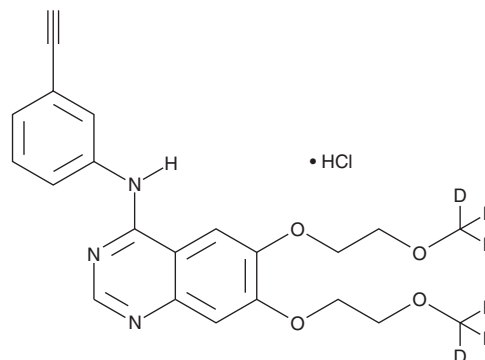
PRODUCT INFORMATION



Erlotinib-d₆ (hydrochloride)

Item No. 22101

CAS Registry No.: 1189953-78-3
Formal Name: N-(3-ethynylphenyl)-6,7-bis[2-(methoxy-d₃)ethoxy]-4-quinazolinamine, monohydrochloride
MF: C₂₂H₁₇D₆N₃O₄ • HCl
FW: 435.9
Chemical Purity: ≥95% (Erlotinib)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Erlotinib-d₆ (hydrochloride) contains six deuterium atoms located on the methoxy group. It is intended for use as an internal standard for the quantification of erlotinib (Item No. 10483) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Erlotinib-d₆ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the erlotinib-d₆ (hydrochloride) in the solvent of choice. Erlotinib-d₆ (hydrochloride) is slightly soluble in methanol and DMSO (heated).

Description

Erlotinib-d₆ is intended for use as an internal standard for the quantification of erlotinib (Item Nos. 10483 | 35517) by GC- or LC-MS. Erlotinib is an EGFR inhibitor (K_i = 2.7 nM).¹ It is greater than 1,000-fold selective for EGFR over Src and Abl at 0.1 μM.² Erlotinib induces caspase-3 and -7 activity in NCI H358 non-small cell lung cancer (NSCLC) cells when used at a concentration of 1 μM.³ Erlotinib (25 mg/kg) reduces EGF-induced EGFR autophosphorylation in an HN-5 head and neck cancer mouse xenograft model.² Formulations containing erlotinib have been used in the treatment of various cancers.

References

1. Ciardiello, F. and Tortora, G. A novel approach in the treatment of cancer: Targeting the epidermal growth factor receptor. *Clin. Cancer Res.* **7(10)**, 2958-2970 (2001).
2. Moyer, J.D., Barbacci, E.G., Iwata, K.K., et al. Induction of apoptosis and cell cycle arrest by CP-358,774, an inhibitor of epidermal growth factor receptor tyrosine kinase. *Cancer Res.* **57(21)**, 4838-4848 (1997).
3. Herbst, R.S. and Bunn, P.A., Jr. Targeting the epidermal growth factor receptor in non-small cell lung cancer. *Clin. Cancer Res.* **9(16)**, 5813-5824 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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