

Erlotinib (Hydrochloride)

Catalog No: tcsc0123



Available Sizes

Size: 1g

Size: 2g

Size: 5g

Size: 10g



Specifications

CAS No:

183319-69-9

Formula:

$C_{22}H_{24}ClN_3O_4$

Pathway:

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

Target:

EGFR;EGFR;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : 6.2 mg/mL (14.42 mM; Need ultrasonic and warming)

Alternative Names:

CP-358774;OSI-774;NSC 718781

Observed Molecular Weight:

429.9

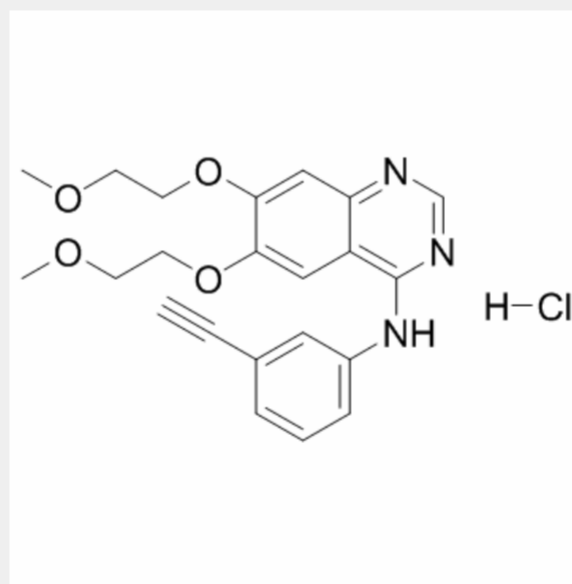
Product Description

Erlotinib hydrochloride inhibits purified **EGFR** kinase with an **IC₅₀** of 2 nM.

IC50 & Target: IC50: 2 nM (EGFR)^[1]

In Vitro: Erlotinib (CP-358,774) Hydrochloride is also a potent inhibitor of the recombinant intracellular (kinase) domain of the EGFR, with an IC₅₀ of 1 nM. The proliferation of DiFi cells is strongly inhibited by Erlotinib with an IC₅₀ of 100 nM for an 8-day proliferation assay^[1]. The combination of B-DIM and Erlotinib (2 μM) results in a significant inhibition of colony formation in BxPC-3 cells when compared with either agent alone. The combination of B-DIM and Erlotinib (2 μM) results in a significant induction of apoptosis only in BxPC-3 cells when compare with the apoptotic effect of either agent alone^[2].

In Vivo: There is a 1.49-fold statistically significant difference between AUC_{0-inf} after p.o. administration of Erlotinib (5 mg/kg) comparing Bcrp1/Mdr1a/1b^{-/-} and WT mice (7,419±1,720 versus 4,957±1,735 ng*h/mL respectively, P=0.01)^[3]. The administration of Erlotinib (10 mg/kg/day, or 20 mg/kg/day) to Bleomycin (BLM)-treated rats shows no exacerbation of lung injuries in indices such as macroscopic findings, lung weights, histopathological scores (lung lesion density and lung fibrosis score), and pulmonary hydroxyproline (HyP) level. The result suggests that Erlotinib does not have any exacerbating effects on lung injuries induced by BLM in rats^[4].



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