

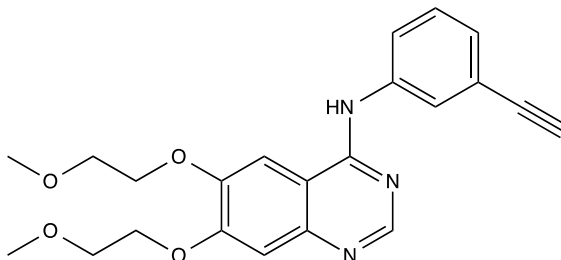
Catalog # 10-2135

Erlotinib HCl

CAS# 183319-69-9

N-(3-Ethynylphenyl)-6,7-bis(2-methoxyethoxy)quinazolin-4-amine hydrochloride

Lot # X101653



Potent inhibitor of EGFR tyrosine kinase ($IC_{50} = 2 \text{ nM}$)¹. Potent inhibitor of mutant JAK2-V617F². Weaker inhibitor of ErbB-2 kinase ($K_i = 1 \text{ }\mu\text{M}$) ErbB-4 kinase ($K_i = 1.5 \text{ }\mu\text{M}$)³. HDAC inhibitors sensitize for erlotinib activity in EGFR-mutated and wildtype non-small cell lung cancer (NSCLC) cells⁴. A clinically effective agent for NSCLC⁵.

- 1) Moyer *et al.* (1997), *Induction of apoptosis and cell cycle arrest by CP-358,774, an inhibitor of epidermal growth factor tyrosine kinases*; *Cancer Res.*, **57** 4838
- 2) Li *et al.* (2007), *Erlotinib effectively inhibits JAK2V617F activity and polycythemia vera cell growth*; *J. Biol. Chem.*, **282** 3428
- 3) Wood *et al.* (2004), *A unique structure for epidermal growth factor receptor bound to GW572016 (Lapatinib): relationships among protein conformation, inhibitor off-rate, and receptor activity in tumor cells*; *Cancer Res.*, **64** 6652
- 4) Greve *et al.* (2015), *The pan-HDAC inhibitor panobinostat acts as a sensitizer for erlotinib activity in EGFR-mutated and – wildtype non-small cell lung cancer cells*; *BMC Cancer*, **15** 947
- 5) Minquet *et al.* (2016), *Targeted therapies for treatment of non-small cell lung cancer-Recent advances and future perspectives*; *Int. J. Cancer*, **138** 2549

PHYSICAL DATA

Molecular Weight:	429.91
Molecular Formula:	C ₂₂ H ₂₃ N ₃ O ₄ · HCl
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 18 mg/ml with warming)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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