



# LKT Laboratories, Inc.

## Erlotinib Hydrochloride

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### Product Information

Product ID E6846  
CAS No. 183319-69-9

#### Chemical Name

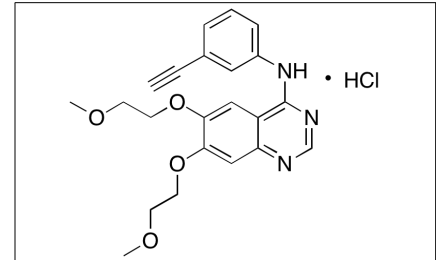
#### Synonym

Formula  $C_{22}H_{23}N_3O_4 \cdot HCl$   
Formula Wt. 429.9  
Melting Point 215-227 °C  
Purity  $\geq 98\%$   
Solubility DMSO (16 mg/mL) H<sub>2</sub>O

Store Temp Ambient

Ship Temp Ambient

**Description** Erlotinib is an inhibitor of EGFR that exhibits anticancer chemotherapeutic benefit; it is currently in clinical trials for the treatment of colorectal cancer, non-small cell lung cancers (NSCLCs), and other advanced cancers. In NSCLC cells, erlotinib increases activation of p53 and AMPK and inhibits activity of mTOR, inducing autophagy. In other in vitro models of NSCLC, this compound upregulates expression of p27 and downregulates expression of skp2, inducing G1/S phase cell cycle arrest and inhibiting cellular growth. In animal models of pancreatic ductal adenocarcinoma, erlotinib inhibits MAPK signaling and increases overall survival rates. Additionally, in male mouse models of lung adenocarcinoma, erlotinib decreases tumor burden.



**Bulk quantities available upon request**

Product ID	Size
E6846	10 mg
E6846	25 mg
E6846	100 mg
E6846	500 mg

**References** Li YY, Lam SK, Mak JC, et al. Erlotinib-induced autophagy in epidermal growth factor receptor mutated non-small cell lung cancer. *Lung Cancer*. 2013 Sep;81(3):354-61. PMID: 23769318.

Miyabayashi K, Ijichi H, Mohri D, et al. Erlotinib prolongs survival in pancreatic cancer by blocking gemcitabine-induced MAPK signals. *Cancer Res*. 2013 Apr 1;73(7):2221-34. PMID: 23378339.

Weickhardt AJ, Price TJ, Chong G, et al. Dual targeting of the epidermal growth factor receptor using the combination of cetuximab and erlotinib: preclinical evaluation and results of the phase II DUX study in chemotherapy-refractory, advanced colorectal cancer. *J Clin Oncol*. 2012 May 1;30(13):1505-12. PMID: 22412142.

Zerbe LK, Dwyer-Nield LD, Fritz JM, et al. Inhibition by erlotinib of primary lung adenocarcinoma at an early stage in male mice. *Cancer Chemother Pharmacol*. 2008 Sep;62(4):605-20. PMID: 18030469.

Ling YH, Li T, Yuan Z, et al. Erlotinib, an effective epidermal growth factor receptor tyrosine kinase inhibitor, induces p27KIP1 up-regulation and nuclear translocation in association with cell growth inhibition and G1/S phase arrest in human non-small-cell lung cancer cell lines. *Mol Pharmacol*. 2007 Aug;72(2):248-58. PMID: 17456787.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.