

# Allitinib tosylate

Catalog No: tcsc1209



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

1050500-29-2

**Formula:**

$C_{31}H_{26}ClFN_4O_5S$

**Pathway:**

JAK/STAT Signaling;Protein Tyrosine Kinase/RTK

**Target:**

EGFR;EGFR

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

AST-1306 (TsOH)

**Observed Molecular Weight:**

621.08

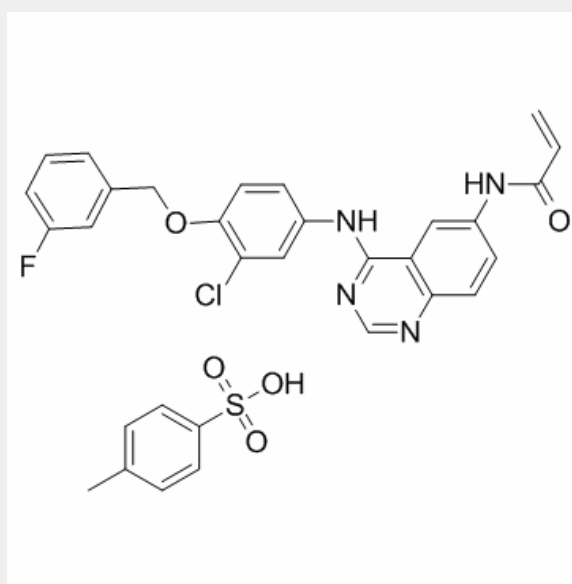
## Product Description

Allitinib tosylate (AST-1306 TsOH) is a novel irreversible inhibitor of EGFR and ErbB2 with IC<sub>50</sub> of 0.5 nM and 3 nM, also effective in mutation EGFR T790M/L858R, more potent to ErbB2-overexpressing cells, 3000-fold selective for ErbB family than other kinases.

IC<sub>50</sub> value: 0.5/3 nM (EGFR/Erb2)[1]

Target: EGFR/Erb2;Mutant EGFR T790M/L858R

Allitinib functions as an irreversible inhibitor, most likely through covalent interaction with Cys797 and Cys805 in the catalytic domains of EGFR and ErbB2, respectively. Further studies showed that Allitinib inactivated pathways downstream of these receptors and thereby inhibited the proliferation of a panel of cancer cell lines. Allitinib is a potent(pM) and selective inhibitor of EGFR and ErbB4 (IC<sub>50</sub> = 500pM and 800 pM, respectively). AST-1306 blocks phosphorylation of EGFR and also prevents downstream pathways. Allitinib also dose-dependently inhibits EGF-induced EGFR phosphorylation in the A549 cancer cell line.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!