

NVP-TAE 684

Catalog No: tcsc0004



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

761439-42-3

Formula:

$C_{30}H_{40}ClN_7O_3S$

Pathway:

Protein Tyrosine Kinase/RTK

Target:

ALK

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

TAE 684

Observed Molecular Weight:

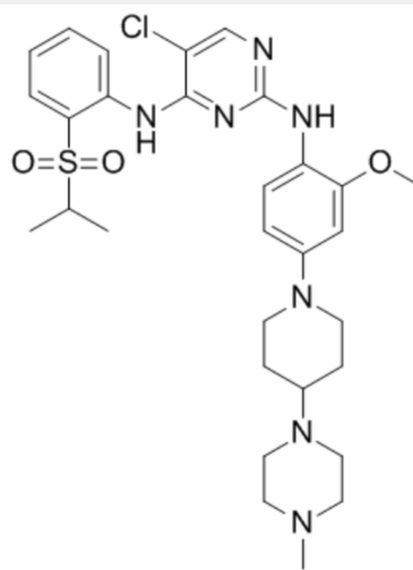
614.2

Product Description

NVP-TAE 684 is a highly potent and selective **ALK** inhibitor, which blocks the growth of ALCL-derived and ALK-dependent cell lines with **IC₅₀** values between 2 and 10 nM.

In Vitro: TAE684 inhibits the proliferation of Ba/F3 NPM-ALK cells with an IC₅₀ of 3 nM, without affecting the survival of parental Ba/F3 cells at concentrations up to 1 μM. TAE684 inhibits STAT3 and STAT5 phosphorylation in a dose-dependent manner in both Ba/F3 NPM-ALK and Karpas-299 cells. TAE684 induces apoptosis and G1 phase arrest in NPM-ALK-expressing Ba/F3 cells and ALCL patient cell lines^[1]. NVP-TAE684 markedly reduces cell survival in both sensitive H3122 and H3122 CR cells, but has little to no effect on the viability of other, non-ALK-dependent cancer cell lines. NVP-TAE684 treatment of H3122 CR cells suppresses phosphorylation of ALK, AKT, and ERK and induces marked apoptosis. TAE684 potently suppresses the survival of Ba/F3 cells expressing the EML4-ALK L1196M mutant^[2]. Neurite outgrowth induced by expression of the mALKR1279Q mutant is completely inhibited at 30 nM NVP-TAE684, which is comparable with the response seen with activated wt mALK^[3].

In Vivo: NVP-TAE684 suppresses lymphomagenesis in two independent models of ALK-positive ALCL and induces regression of established Karpas-299 lymphomas. TAE684 displays appreciable bioavailability and half-life in vivo. TAE684 (1, 3, and 10 mg/kg. p.o.) significantly delays in lymphoma development and shows 100- to 1,000-fold reduction in luminescence signal. The TAE684- (10 mg/kg) treated group appears healthy and does not display any signs of compound- or disease-related toxicity^[1].



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