

NVP-TAE 226

Catalog No: tcsc0594



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

761437-28-9

Formula:

$C_{23}H_{25}ClN_6O_3$

Pathway:

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK

Target:

Pyk2;FAK

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

TAE226

Observed Molecular Weight:

468.94

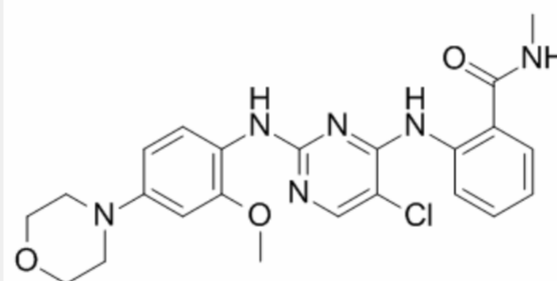
Product Description

NVP-TAE 226 is a dual tyrosine kinase inhibitor of **FAK** ($IC_{50}=5.5$ nM) and **IGF-IR** (mean $IC_{50}=0.14$ μ M).

IC50 & Target: IC50: 5.5 nM (FAK), 3.5 nM (Pyk2), 0.14 μ M (IGF-IR), 0.16 μ M (c-Met), 0.36 μ M (KDR), 0.48 μ M (Flt3)^[1]

In Vitro: NVP-TAE 226 (TAE226), a potent ATP-competitive inhibitor of several tyrosine protein kinases, in particular FAK and IGF-IR kinases. In a cell-based kinase assays, FAK, IGF-IR kinase, and IR kinase are inhibited with an IC_{50} range of 100 to 300 nM compared with the other kinases tested, which are >10-fold less sensitive. In culture, NVP-TAE 226 inhibits extracellular matrix-induced autophosphorylation of FAK (Tyr³⁹⁵). NVP-TAE 226 also inhibits IGF-I-induced phosphorylation of IGF-IR and activity of its downstream target genes such as *MAPK* and *Akt*. NVP-TAE 226 retards tumor cell growth as assessed by a cell viability assay and attenuates G₂-M cell cycle progression associated with a decrease in cyclin B1 and phosphorylated cdc2 (Tyr¹⁵) protein expression. NVP-TAE 226 treatment inhibits tumor cell invasion by at least 50% compared with the control in an in vitro Matrigel invasion assay. Interestingly, TAE226 treatment of tumor cells containing wild-type p53 mainly exhibits G₂-M arrest, whereas tumor cells bearing mutant p53 underwent apoptosis^[1].

In Vivo: Treatment with NVP-TAE 226 (TAE226) at 50 or 75 mg/kg extends the median survival of U87 xenograft animals by 6 and 7 days, respectively (P=0.084 and P=0.042, respectively, compared with vehicle-treated animals). However, NVP-TAE 226 treatment of LN229-engrafted animals significantly prolongs their median survival by 19 days (P[1]).



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