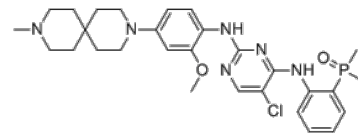


Product Name	: Iruplinalkib
Cat. No.	: PC-73422
CAS No.	: 1854943-32-0
Molecular Formula	: C ₂₉ H ₃₈ ClN ₆ O ₂ P
Molecular Weight	: 569.087
Target	: Anaplastic Lymphoma Kinase (ALK)
Solubility	: 10 mM in DMSO



Biological Activity

Iruplinalkib (WX-0593) is a potent **ALK** inhibitor, inhibits the activity of both wild type (IC₅₀=5.38 nM) and resistant mutants of ALK (ALKL1196M IC₅₀=9.26 nM) in vitro, and overcomes crizotinib-resistant mutations.

WX-0593 displayed potent enzymatic activities for ALKWT, ALKL 1196M, ALK C1156Y and EGFR L858R/T790M with IC₅₀ of 5.38, 9.26, 9.28, and 16.74 nM respectively.

WX-0593 also showed expected anti-proliferative activity in six cell lines, Karpas-299, Ba/F3, Ba/F3 (EML4-ALK-WT), Ba/F3 (EML4-ALK-L1196M), Ba/F3 (EML4-ALK-C1156Y), and NCI-H1975, with IC₅₀ of 4.5, 2208, 4, 9.5, 9, and 508 nM, respectively.

WX-0593 could fully inhibit p-ALK, p-ERK, p-STAT5 at 11.1 nM and p-AKT at 100 nM in NCI-H3122 cells.

WX-0593 can inhibit the activity of both wild type and crizotinib resistant ALK and showed strong antitumor activity in vitro and in vivo preclinical models.

References

Liu X, et al. *Bioorg Med Chem Lett*. 2022 Apr 11;66:128730.

Shi Y, et al. *Signal Transduct Target Ther*. 2022 Jan 28;7(1):25.

Liu Xile, et al. *Cancer Research* 78(13 Supplement):4794-4794.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com