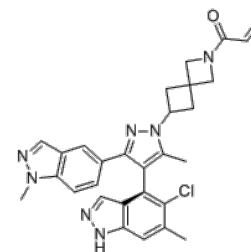


Product Name : JDQ443
Cat. No. : PC-72897
CAS No. : 2653994-08-0
Molecular Formula : C₂₉H₂₈ClN₇O
Molecular Weight : 526.03
Target : Ras
Solubility : 10 mM in DMSO (5.3 mg/mL)



Biological Activity

Opnurasib (JDQ443, NVP-JDQ443) is a potent, mutant-selective, covalent **KRAS G12C** inhibitor. JDQ443 promotes dose-dependent reductions of phosphorylated ERK (pERK) levels and the proliferation of the KRASG12C-mutated cell lines NCI-H358 and NCI-H2122 with IC₅₀ of 18 and 63 nM, respectively. JDQ443 binds under the switch II loop with a novel binding mode, exploiting unique interactions with the KRAS G12C protein compared to sotorasib and adagrasib. JDQ443 potently inhibits KRASG12C cellular signaling and proliferation in a mutant selective manner. JDQ443 exhibits dose-dependent anti-tumor activity in mice bearing KRAS G12C mutated tumor xenografts comparable to sotorasib and adagrasib. JDQ443 is orally bioavailable and is well-tolerated. Combination of JDQ443 with the SHP2 inhibitor TNO155 further increases KRAS G12C target occupancy in vivo, enhanced pre-clinical anti-tumor activity, and delayed the emergence of resistance in xenografts.

References

Saskia M. Brachmann, et al. *Mol Cancer Ther* (2021) 20 (12_Supplement): P124.

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

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