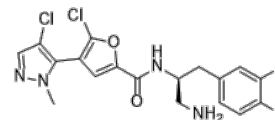


Product Name : Uprosertib
Cat. No. : PC-27801
CAS No. : 1047634-65-0
Molecular Formula : C₁₈H₁₆Cl₂F₂N₄O₂
Molecular Weight : 429.25
Target : Akt
Solubility : 10 mM in DMSO



Biological Activity

Uprosertib (GSK2141795) is a potent, selective, ATP-competitive and orally bioavailable **AKT** inhibitor with IC₅₀ of 0.066 nM, 1.4 nM and 1.5 nM for Akt1, Akt2 and Akt3 respectively.

Uprosertib (GSK2141795) inhibits the kinase activity of the E17K AKT 1 mutant protein with EC₅₀ of 0.2 nM.

Uprosertib (GSK2141795) shows concentration-dependent effect on multiple AKT substrate phosphorylation levels, including GSK3β, PRAS40, FOXO and Caspase 9 in both cell lines, exhibits growth inhibition in human cancer cell lines.

Uprosertib (GSK2141795) (10, 20 and 30 mg/kg, QD) shows tumor growth inhibition (TGI) of 73, 85 or 93% in mice bearing BT474 tumors.

Combining Uprosertib (GSK2141795) with the AKT inhibitor or MEK inhibitor (GSK2110212; trametinib) resulted in an enhanced anti-tumor effect accompanied with greater reduction in phospho-S6 levels.

References

Datta J, et al. *Mol Cancer Ther*. 2017 Apr;16(4):614-624.

Dumble M, et al. *PLoS One*. 2014 Jun 30;9(6):e100880.

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

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