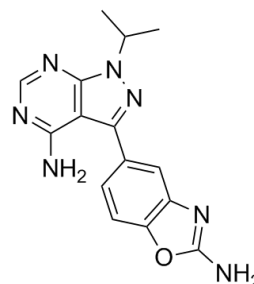


Product Name : Sapanisertib
Synonyms : INK-128; MLN0128
Cat No. : M10859
CAS Number : 1224844-38-5
Molecular Formula : C₁₅H₁₅N₇O
Formula Weight : 309.33
Chemical Name : 1H-Pyrazolo[3,4-d]pyrimidin-4-amine, 3-(2-amino-5-benzoxazolyl)-1-(1-methylethyl)-



Description : Sapanisertib (INK-128, MLN0128) is a potent, ATP-competitive, orally active dual mTORC1/2 inhibitor with K_i of 1.4 nM in cell-free assays, >200-fold selectivity over class I PI3K isoforms; inhibits both the phosphorylation of S6 and 4EBP1, the downstream substrates of TORC1, and selectively inhibits AKT phosphorylation at Ser473, the downstream substrate of TORC2; also shows potent inhibition effects on cell lines resistant to rapamycin and pan-PI3K inhibitors; shows tumor growth inhibition efficacy in multiplexenograft models. Brain Cancer Phase 2 Clinical

Pathway : PI3K/Akt/mTOR signaling

Target : mTOR

Receptor : mTOR; PI3Kα; PI3Kγ; PI3Kδ

Solubility : 10 mM in DMSO

SMILES : NC1=C2C(N(C(C)C)N=C2C3=CC=C(OC(N)=N4)C4=C3)=NC=N1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Hsieh AC, et al. Nature. 2012 Feb 22;485(7396):55-61. | 2. Gkmen-Polar Y, et al. Breast Cancer Res Treat. | 3. Maiso P, et al. Blood. 2011 Dec 22;118(26):6860-70. | 4. Janes MR, et al. Leukemia. 2013 Mar;27(3):586-94.