Product Data Sheet

Product Name: Vevorisertib tetrahydrochloride
Cat. No.: GC81892

Chemical Properties

Cas. No.

Formula	$C_{35}H_{42}Cl_4N_8O$	M.Wt	732.57
Solubility	DMSO: 100 mg/mL (136.51 mM; Need ultrasonic)	Storage	Store at 4°C, sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure

Background

Vevorisertib tetrahydrochloride (ARQ 751 tetrahydrochloride) is an orally active allosteric AKT inhibitor that blocks AKT phosphorylation. Vevorisertib tetrahydrochloride inhibits tumor cell

proliferation through Cyclin D1 and Ki67. Vevorisertib tetrahydrochloride inhibits liver fibrosis through collagen accumulation, alpha-SMA, COL1, and TGF-beta. Vevorisertib tetrahydrochloride reduces total bilirubin. Vevorisertib tetrahydrochloride significantly reduces tumor size in a cirrhotic rat HCC model. Vevorisertib tetrahydrochloride can be used for research on hepatocellular carcinoma [1].

In Vivo, Vevorisertib (10 mg/kg/day; p.o.; daily; 15 days) tetrahydrochloride significantly reduces tumor size, decreases tumor number, inhibits tumor cell proliferation, and ameliorates liver fibrosis in the diethylnitrosamine (DEN)-induced cirrhotic rat HCC model[1].

In Vitro, Vevorisertib tetrahydrochloride completely blocks AKT (Ser473) phosphorylation in Hep3B, HepG2, HuH7, and PLC/PRF/5 cell lines at both IC20 and IC_{50} concentrations[1].

References:
[1]. Kurma K, et al. Effect of Novel AKT Inhibitor Vevorisertib as Single Agent and in Combination with Sorafenib on Hepatocellular Carcinoma in a Cirrhotic Rat Model. International journal of molecular sciences. 2022 Dec 19;23(24):16206.