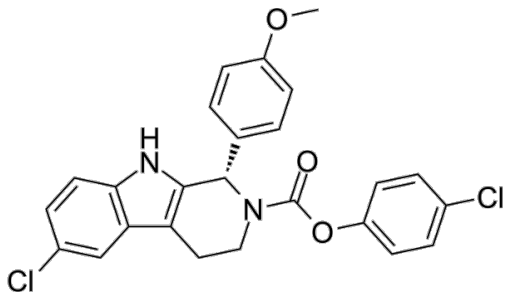
Product Data Sheet

Product Name: PTC299
Cat. No.: GC65335

Chemical Properties

Cas. No.	1256565-36-2		
Formula	C25H20Cl2N2O3	M.Wt	467.34
Solubility	DMSO : 50 mg/mL (106.99 mM; Need ultrasonic)	Storage	Store at -20°C
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

PTC299 is an orally active inhibitor of VEGFA mRNA translation that selectively inhibits VEGF protein synthesis at the post-transcriptional level. PTC299 is also a potent inhibitor of dihydroorotate

dehydrogenase (DHODH). PTC299 shows good oral bioavailability and lack of off-target kinase inhibition and myelosuppression. PTC299 can be useful for the research of hematologic malignancies[1][2].

PTC299 inhibits hypoxia-induced VEGFA protein production in HeLa cells with an EC50 of 1.64 ± 0.83 nM[1].PTC299 is the most potent inhibitor with an IC50 of about 1 nM, over 10 to 1000-fold more potent than Brequinar, Vidofludimus or A 77-1726 in leukemia cells[1].

[1]. Cao L, et al. Targeting of Hematologic Malignancies with PTC299, A Novel Potent Inhibitor of DihydroorotateDehydrogenase with Favorable Pharmaceutical Properties. Mol Cancer Ther. 2019 Jan;18(1):3-16.
[2]. Bender Ignacio RA, et al. Brief Report: A Phase 1b/Pharmacokinetic Trial of PTC299, a Novel PostTranscriptional VEGF Inhibitor, for AIDS-Related Kaposi's Sarcoma: AIDS Malignancy Consortium Trial 059. J Acquir Immune Defic Syndr. 2016 May 1;72(1):52-7.
[3]. Packer RJ, et al. Phase I and pharmacokinetic trial of PTC299 in pediatric patients with refractory or recurrent central nervous system tumors: a PBTC study. J Neurooncol. 2015;121(1):217-224.
[4]. Zeng Z, et al, Targeting dihydroorotate dehydrogenase in acute myeloid leukemia. Haematologica. 2018 Sep;103(9):1415-1417.