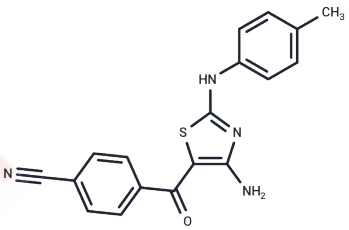
Data Sheet (Cat.No.T23601)

TargetMol

ABC1183

Chemical Properties



CAS No. :	1042735-18-1
Formula:	C18H14N4OS
Molecular Weight:	334.39
Storage:	Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	ABC1183 is a novel diaminothiazole that inhibits GSK3α, GSK3β and CDK9. ABC1183 inhibits the growth of a numerous cancer cell lines by decreasing cell survival by inducing G2/M arrest and through altering GSK3, glycogen synthetase, β-catenin phosphorylation and MCL1 expression,and is orally active.
Targets(IC50)	CDK,GSK-3
In vitro	ABC1183 inhibits cell proliferation and tumor growth of various cancer types by specifically attenuating GSK3 and CDK9 activity. ABC1183 altered GSK3 activity as indicated by decreased GSK3α/β and GS phosphorylation and increased β-catenin phosphorylation[1].
In vivo	Murine melanoma B16 tumors were propagated in C57BL/6 mice were treated with oral ABC1183 or vehicle. Tumor growth was decreased more than 70% within 8 days by ABC1183 treatment. On the basis of body weight, gross toxicities were not observed. ABC1183 was determined to suppress tumor growth in the absence of organ and hematopoietic toxicity. The expression of tumor necrosis factor alpha (TNF-α) and interleukin-6 (IL-6) were suppressed[1][2].

Solubility Information

Solubility	DMSO: 3.35 mg/mL (10.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9905 mL	14.9526 mL	29.9052 mL
5 mM	0.5981 mL	2.9905 mL	5.981 mL
10 mM	0.2991 mL	1.4953 mL	2.9905 mL
50 mM	0.0598 mL	0.2991 mL	0.5981 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Schrecengost RS, et al. In Vitro and In Vivo Antitumor and Anti-Inflammatory Capabilities of the Novel GSK3 and CDK9 Inhibitor ABC1183. J Pharmacol Exp Ther. 2018 Apr;365(1):107-116.
Duda P, et al. Targeting GSK3 and Associated Signaling Pathways Involved in Cancer. Cells. 2020 Apr 30;9(5):1110.