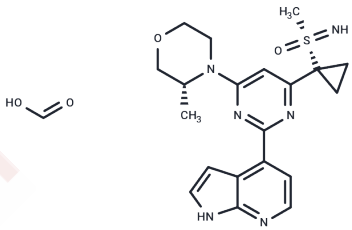
Data Sheet (Cat.No.T26981)

TargetMol

Ceralasertib formate

Chemical Properties



CAS No. : 1352280-98-8

Formula: C21H26N6O4S

Molecular Weight: 458.54

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	Ceralasertib is an orally available inhibitor of ataxia telangiectasia and rad3 related (ATR) kinase. Ceralasertib selectively inhibits ATR activity by blocking the downstream phosphorylation of the serine/threonine protein kinase CHK1. This prevents ATR-mediated signaling, and results in the inhibition of DNA damage checkpoint activation, disruption of DNA damage repair, and the induction of tumor cell apoptosis.
Targets(IC50)	ATM/ATR,Others

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1808 mL	10.9042 mL	21.8083 mL
5 mM	0.4362 mL	2.1808 mL	4.3617 mL
10 mM	0.2181 mL	1.0904 mL	2.1808 mL
50 mM	0.0436 mL	0.2181 mL	0.4362 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

Min A, Im SA, Jang H, Kim S, Lee M, Kim DK, Yang Y, Kim HJ, Lee KH, Kim JW, Kim TY, Oh DY, Brown J, Lau A, O Connor MJ, Bang YJ. AZD6738, a novel oral inhibitor of ATR, induces synthetic lethality with ATM-deficiency in gastric cancer cells. Mol Cancer Ther. 2017 Jan 30. pii: molcanther.0378.2016. doi: 10.1158/1535-7163.MCT-16-0378. [Epub ahead of print] PubMed PMID: 28138034.

Vendetti FP, Lau A, Schamus S, Conrads TP, O'Connor MJ, Bakkenist CJ. The orally active and bioavailable ATR kinase inhibitor AZD6738 potentiates the anti-tumor effects of cisplatin to resolve ATM-deficient non-small cell lung cancer in vivo. Oncotarget. 2015 Dec 29;6(42):44289-305. doi: 10.18632/oncotarget.6247. PubMed PMID: 26517239; PubMed Central PMCID: PMC4792557.

Kim HJ, Min A, Im SA, Jang H, Lee KH, Lau A, Lee M, Kim S, Yang Y, Kim J, Kim TY, Oh DY, Brown J, O'Connor MJ, Bang YJ. Anti-tumor activity of the ATR inhibitor AZD6738 in HER2 positive breast cancer cells. Int J Cancer. 2017 Jan 1;140 (1):109-119. doi: 10.1002/ijc.30373. PubMed PMID: 27501113.

Dillon MT, Barker HE, Pedersen M, Hafsi H, Bhide SA, Newbold KL, Nutting CM, McLaughlin M, Harrington KJ. Radiosensitization by the ATR Inhibitor AZD6738 through Generation of Acentric Micronuclei. Mol Cancer Ther. 2017 Jan;16(1):25-34. doi: 10.1158/1535-7163.MCT-16-0239. PubMed PMID: 28062704; PubMed Central PMCID: PMC5302142.