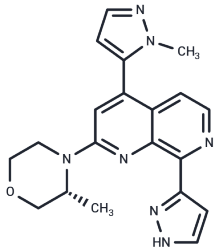
Data Sheet (Cat.No.T7318)

TargetMol

Elimusertib

Chemical Properties



CAS No. : 1876467-74-1

Formula: C20H21N7O

Molecular Weight: 375.43

Storage: Store at low temperature
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	Elimusertib (BAY-1895344) is a potent, highly selective, and orally available ATR inhibitor with an IC50 of 7 nM, demonstrating significant anti-tumor efficacy as a monotherapy and strong combination potential with targeted alpha therapy Radium-223 dichloride.
Targets(IC50)	ATM/ATR
In vivo	The novel selective ATR kinase inhibitor Elimusertib on tumor cell growth and viability. Potent antiproliferative activity was demonstrated in a broad spectrum of human tumor cell lines.Elimusertib exhibited strong monotherapy efficacy in cancer xenograft models that carry DNA damage repair deficiencies.The combination of Elimusertib with DNA damage-inducing chemotherapy or external beam radiotherapy (EBRT) showed synergistic antitumor activity.Combination treatment with Elimusertib and DDR inhibitors achieved strong synergistic antiproliferative activity in vitro, and combined inhibition of ATR and PARP signaling using olaparib demonstrated synergistic antitumor activity in vivo Furthermore, the combination of Elimusertib with the novel, nonsteroidal androgen receptor antagonist darolutamide resulted in significantly improved antitumor efficacy compared with respective single-agent treatments in hormone-dependent prostate cancer,and addition of EBRT resulted in even further enhanced antitumor efficacy[1].

Solubility Information

Solubility	DMSO: 22.5 mg/mL (59.93 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6636 mL	13.3181 mL	26.6361 mL
5 mM	0.5327 mL	2.6636 mL	5.3272 mL
10 mM	0.2664 mL	1.3318 mL	2.6636 mL
50 mM	0.0533 mL	0.2664 mL	0.5327 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

Wengner A M , Siemeister G , Ulrich Lücking, et al. The Novel ATR Inhibitor BAY 1895344 Is Efficacious as Monotherapy and Combined with DNA Damage-Inducing or Repair-Compromising Therapies in Preclinical Cancer Models[J]. Molecular Cancer Therapeutics, 2019, 19(1):molcanther.0019.2019.
Preclinical Combination Studies of an FGFR2 Targeted Thorium-227 Conjugate and the ATR Inhibitor BAY 1895344 [J]. International Journal of Radiation Oncology*Biology*Physics, 2019, 105(2):410-422.
Yap T A , Tan D S , Terbuch A , et al. First-in-Human Trial of the Oral Ataxia Telangiectasia and Rad3-Related Inhibitor BAY 1895344 in Patients with Advanced Solid Tumors[J]. Cancer Discovery, 2020.