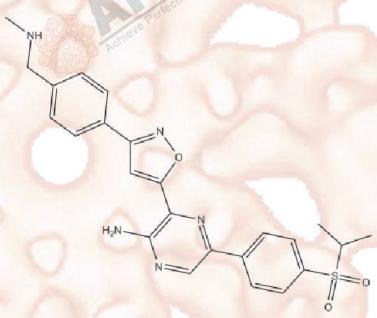
Product Data Sheet

VE-822

Cat. No.:	B1383
CAS No.:	1232416-25-9
Formula:	C24H25N5O3S
M.Wt:	463.55
Synonyms:	
Target:	DNA Damage/DNA Repair
Pathway:	ATM/ATR
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

≥50 mg/mL in DMSO; insoluble in H2O; insoluble in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.1573 mL	10.7863 mL	21.5726 mL
5 mM	0.4315 mL	2.1573 mL	4.3145 mL
10 mM	0.2157 mL	1.0786 mL	2.1573 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	ATR inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Pancreatic ductal adenocarcinoma cell (PDAC)
Preparation method:	Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	1-2 h

	Applications:	VE-822 decreases survival of irradiated p53-mutant and K-Ras mutant PDACs. Combination of VE-822 and gemcitabine reduces survival B2–3-fold and significantly more after chemoradiotherapy. In addition, VE-822 increases radation-induced residual gH2AX and 53BP1 foci and decreases Rad51 foci after radiation.
In Vivo	**Animal experiment**	
	Animal models:	Female Balb/c nude mice, pancreatic cancer xenografts
	Dosage form:	Oral gavage, 60 mg/kg
	Applications:	VE-822 inhibits phospho-Ser-345-Chk1 following treatment of DNA-damaging agents. Combination of VE-822 and radiation significantly prolongs the tumor growth delay compared with the radiation alone. Furthermore, tumor growth delay is substantially longer in the combination group of VE-822+gemcitabine+radiation compared with the combination group of gemcitabine+radiation.
	Preparation method:	10% Vitamin E d-alpha tocopheryl polyethylene glycol 1000 succinate
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Koppenhafer SL, Goss KL, et al. "mTORC1/2 and protein translation regulate levels of CHK1 and the sensitivity to CHK1 inhibitors in Ewing sarcoma cells." Mol Cancer Ther. 2018 Oct 3. pii: molcanther.0260.2018.PMID:28808226

2. Le TM, Poddar S, Capri JR, et al. "ATR inhibition facilitates targeting of leukemia dependence on convergent nucleotide biosynthetic pathways." Nat Commun. 2017 Aug 14;8(1):241.PMID:28808226

See more customer validations on www.apexbt.com.

References

1. Fokas E, Prevo R, Pollard JR et al. Targeting ATR in vivo using the novel inhibitor VE-822 results in selective sensitization of pancreatic tumors to radiation. Cell Death Dis. 2012 Dec 6;3:e441.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt

of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com