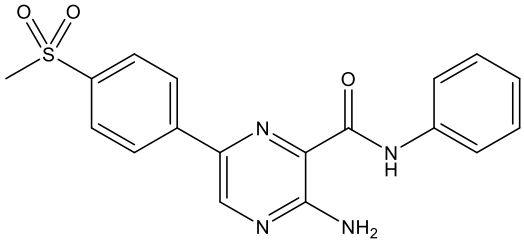
Catalog # 10-5589

VE-821

CAS# 1232410-49-9

3-Amino-6-[4-(methlsulfonyl)phenyl)-*N*-phenyl-2-pyrazinecarboxamide

Lot # X109621



VE-821 is a potent and selective ATP-competitive ATR (Ataxia-telangiectasia and Rad3-related protein) inhibitor, K_i=13 nM.[1] Increases the sensitivity of pancreatic[2] and ovarian[3] cancer cells to radiation and chemotherapy. Increased replication stress induced by PARP inhibitors or chemotherapeutic agents increases sensitivity to VE-821 in neuroblastoma cells.[4] Enhances the cytotoxicity of DNA damaging agents.[5]

References/Citations:

1) Reaper *et al*. (2011), *Selective killing of ATM- or p53-deficient cancer cells through inhibition of ATR*; Nat. Chem. Biol., **7** 428
2) Prevo *et al*. (2012), *The novel ATR inhibitor VE-821 increases sensitivity of pancreatic cancer cells to radiation and chemotherapy*; Cancer Biol. Ther., **13** 1072
3) Huntoon *et al*. (2013), *ATR inhibition broadly sensitizes ovarian cancer cells to chemotherapy independent of BRCA status*; Cancer Res., **73** 3683
4) King *et al.* (2021), *Increased Replication Stress Determines ATR Inhibitor Sensitivity in Neuroblastoma Cells*; Cancers (Basel), **13** 6215
5) Moolmuang and Ruchirawat (2021), *The antiproliferative effects of ataxia-telangiectasia mutated and ATM- and Rad3-related inhibitions and their enhancements with the cytotoxicity of DNA damaging agents in cholangiocarcinoma cells*; J. Pharm. Pharmacol., **73** 40

PHYSICAL DATA

Molecular Weight:	368.41
Molecular Formula:	$C_{18}H_{16}N_4O_3S$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (40 mg/ml)
Physical Description:	Beige solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO may be stored at -20°C for up to 1 month.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com