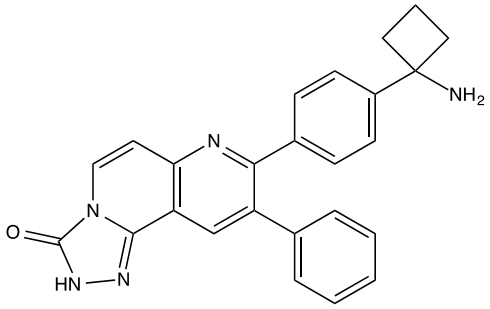
Catalog # 10-4801

MK-2206

CAS# 1032350-13-2

8-(4-(1-Aminocyclobutyl)phenyl-9-phenyl-2H-[1,2,4]triazolo[3,4-f][1,6]naphthyridin-3-one dihydrochloride

Lot # FBS1065



MK-2206 is a potent and selective allosteric inhibitor of Akt (IC_{50}'s: Akt1 = 5 nM, Akt2 = 12 nM, Akt3 = 65 nM) that enhances the *in vitro* and *in vivo* antitumor efficacy of several standard chemotherapeutic agents.[1] It was able to decrease insulin-stimulated glucose uptake, glycogen synthesis and glycogen synthase activity in rat muscle.[2] MK-2206 induced G1-phase cycle arrest and sensitized HepG2 hepatocellular carcinoma cells to TRAIL-induced apoptosis.[3]

1) Hirai *et al.* (2010), *MK-2206, an Allosteric Akt inhibitor, Enhances Antitumor Efficacy by Standard Chemotherapeutic Agents or Molecular targeted Drugs In vitro and In vivo;* Mol.Cancer Ther. **9** 1956
2) Lai *et al*. (2012), *A novel PKB/Akt inhibitor, MK-2206, effectively inhibits insulin-stimulated glucose metabolism and protein synthesis in isolated rat skeletal muscle*; Biochem.J. **447** 137
3) Jiao *et al*. (2013), *MK-2206 induces cell cycle arrest and apoptosis in HepG2 cells and sensitizes TRAIL-mediated cell death*; Mol.Cell Biochem. **382** 217

PHYSICAL DATA

Molecular Weight:	480.39
Molecular Formula:	$C_{25}H_{21}N_5O \cdot 2HCl$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (10 mg/mL with warming)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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