

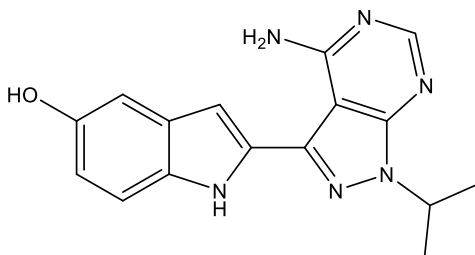
Catalog #10-2695

PP242

CAS# 1092351-67-1

2-[4-Amino-1-(1-methylethyl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl]-1H-indol-5-ol; Torkinib

Lot # E106519



PP242 is an ATP-competitive mTORC1/mTORC2 inhibitor ($IC_{50} = 8 \text{ nM}$) displaying high selectivity over PI 3K family kinases (IC_{50} s = 0.102 to 2.2 μM) and modest selectivity over PKC family kinases (IC_{50} s = 0.049 to 0.198 μM).^{1,2} PP 242 (but not rapamycin) induced the death of mouse and human leukemia cells but was much weaker than rapamycin at induction of death of normal lymphocytes.³ Restores lysosomal activity and facilitates clearance of amyloid- β in a mouse model of dry age-related macular degeneration.⁴ Inhibits glioblastoma cell proliferation, migration, invasiveness, and stemness.⁵

- 1) Aspel *et al.* (2008), *Targeted polypharmacology: Discovery of dual inhibitors of tyrosine and phosphoinositide kinases*; Nat. Chem. Biol. **4** 691
- 2) Feldman *et al.* (2009), *Active-site inhibitors of mTOR target rapamycin-resistant outputs of mTORC1 and mTORC2*; PLoS Biol. **7** 371
- 3) Janes *et al.* (2010), *Effective and selective targeting of leukemia cells using a TORC1/2 kinase inhibitor*; Nat. Med. **16** 205
- 4) Jo *et al.* (2023), *Activation of Lysosomal Function Ameliorates Amyloid- β -Induced Tight Junction Disruption in the Retinal Pigment Epithelium*; Mol. Cells **46** 675
- 5) Mecca *et al.* (2018), *PP242 Counteracts Glioblastoma Cell Proliferation, Migration, Invasiveness and Stemness Properties by Inhibiting mTORC2/AKT*; Front. Cell. Neurosci. **12** 99

PHYSICAL DATA

Molecular Weight:	308.35
Molecular Formula:	$C_{16}H_{16}N_6O$
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (8 mg/mL)
Physical Description:	Off-white to beige solid
Storage and Stability:	Store as supplied 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.

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