

Catalog # 10-1555

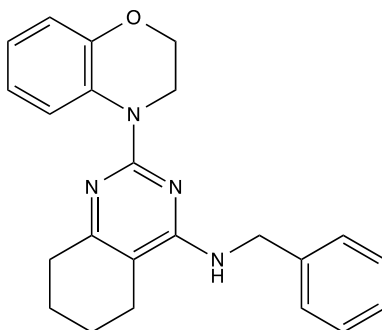
ML241

CAS# 1346528-06-0

N-Benzyl-2-(2,3-dihydro-1,4-benzoxazin-4-yl)-5,6,7,8-tetrahydroquinazolin-4-amine

CID49830260

Lot # X106512



Potent and selective p97 AAA ATPase inhibitor, $IC_{50}=100$ nM. Inhibits degradation of a p97-dependent but not p97-independent proteasome substrate in a dual-reporter cell line¹. It impairs the endoplasmic reticulum-associated degradation (ERAD) pathway.¹ ML241 and related inhibitors (DBeQ for example) have differential responses to p97 mutants as well as the presence of cofactors suggesting the possibility of context-dependent p97 inhibitors.^{2,3}

- 1) Chou *et al.* (2013), *Structure-activity relationship study reveals ML240 and ML241 as potent and selective inhibitors of p97 ATPase*; Chem. Med. Chem., **8** 297
- 2) Chou *et al.* (2014) *Specific inhibition of p97/VCP ATPase and kinetic analysis demonstrate interaction between D1 and D2 ATPase domains*; J. Mol. Biol. **426** 2886
- 3) Fang *et al.* (2015) *Evaluating p97 inhibitor analogues for their domain selectivity and potency against the p97-p47 complex*; Chem. Med. Chem. **10** 52

PHYSICAL DATA

Molecular Weight:	372.46
Molecular Formula:	C ₂₃ H ₂₄ N ₄ O
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml) or Ethanol (up to 14 mg/ml with warming)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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