

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, IC₅₀=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 amd 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: C₂₃H₂₄N₄O

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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