p97

VCP; Cdc48

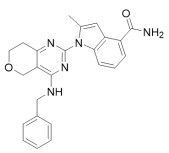
p97, an abundant hexameric ATPase of the AAA family, is involved in homotypic membrane fusion. It is thought to disassemble SNARE complexes formed during the process of membrane fusion. Two structures have been reported: a crystal structure of the N-terminal and D1 ATPase domains of murine p97 at 2.9 A resolution, and a cryoelectron microscopy structure of full-length rat p97 at 18 A resolution. Together, these structures show that the D1 and D2 hexamers pack in a tail-to-tail arrangement, and that the N domain is flexible. A comparison with NSF D2 (ATP complex) reveals possible conformational changes induced by ATP hydrolysis.

p97 Inhibitors

CB-5083

Cat. No.: HY-12861

CB-5083 is a first-in-class, potent, selective, and orally bioavailable inhibitor of the **p97 AAA ATPase/VCP**. CB-5083 selectively inhibits p97 through its D2 site with the IC_{50} of 11 nM.



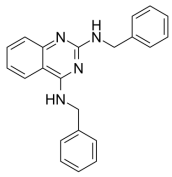
Purity: 99.95%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

DBeQ

(JRF 12)

Cat. No.: HY-15945

DBeQ is a selective, potent, reversible, and ATP-competitive **p97** inhibitor, with an IC_{50} value of 1.5 μM and 1.6 μM for p97(wt) and p97(C522A), respectively; DBeQ also inhibits **Vps4** with an IC_{50} of 11.5 μM.

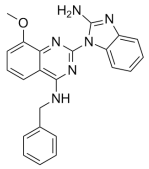


Purity: 99.94%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

ML240

Cat. No.: HY-19795

ML240 is a potent **p97** inhibitor, inhibiting p97 ATPase with IC_{50} value of 100 nM.

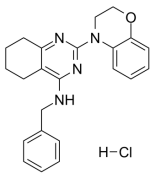


Purity: 99.76%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

ML241 hydrochloride

Cat. No.: HY-19797A

ML241 hydrochloride is a potent **p97** inhibitor, inhibiting p97 ATPase with IC_{50} value of 100 nM.

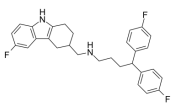


Purity: 99.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

MSC1094308

Cat. No.: HY-123872

MSC1094308 is a reversible and allosteric inhibitor of the type II AAA ATPase human ubiquitin-directed unfoldase **(VCP)/p97** and the type I AAA ATPase **VPS4B**, with IC_{50} values of 0.71 μM and 7.2 μM for VPS4B and p97, respectively.

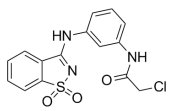


Purity: 99.75%
Clinical Data:
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

NMS-859

Cat. No.: HY-15714

NMS-859 is a potent, covalent **VCP (p97)** inhibitor, with IC_{50}s of 0.37 and 0.36 μM for wild-type VCP in the presence of 60 μM and 1 mM ATP in cells, respectively.

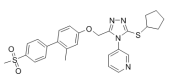


Purity: 97.65%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

NMS-873

Cat. No.: HY-15713

NMS-873 is a potent, selective allosteric **VCP/p97** inhibitor with an IC_{50} value of 30 nM.



Purity: 99.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg