BioVision 08/16

PRODUCT: ML-240

**ALTERNATE NAME:** 2-(2-Amino-1*H*-benzimidazole-1-yl)-8-methoxy-*N*-

(phenylmethyl)-4-quinazolinamine

**CATALOG #**: B1142-5, 25

**AMOUNT:** 5 mg, 25 mg

STRUCTURE:

MOLECULAR FORMULA: C<sub>23</sub>H<sub>20</sub>N<sub>6</sub>O

MOLECULAR WEIGHT: 396.44

**CAS NUMBER:** 1346527-98-7

APPEARANCE: White solid

**SOLUBILITY:** DMSO (>5 mg/ml)

**PURITY:** ≥98% by HPLC

STORAGE: Store at -20°C. Protect from air and light.

**DESCRIPTION:** ML-240 is an ATP-competitive inhibitor of the D2 domain of

the p97 ATPase (IC $_{50}$  = 110 nM). It disrupts the endoplasmic reticulum-associated degradation and autophagy pathways, preventing the degradation of p97-dependent proteasome substrates (IC $_{50}$  = 0.9  $\mu$ M) and causing accumulation of ubiquitin conjugates in nuclear membrane and cytosolic compartments at 5-10  $\mu$ M. ML-240 has also been shown to block proliferation of HCT15 and SW403 colon cancer cell lines (GI $_{50}$ S = 0.76 and 0.5  $\mu$ M, respectively) and to rapidly

mobilize caspase-3 and -7, inducing apoptosis.

REFERENCES: Chou, T.F., et al. (2013). ChemMedChem 8, 297-312.

**HANDLING:** Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:** 

CB5083 **(B1032)** DBeQ **(1858)** 

Eeyarestatin 1 (9602)

MDBN **(2033)** ML241 **(2697)** 

NMS-873 (9600)

USAGE: FOR RESEARCH CH USE ONLY! Not to be used in humans