

Catalog # 10-1604 MHY1485

CAS# 326914-06-1 4,6-Di-4-morpholinyl-N-(4-nitrophenyl)-1,3,5-triazin-2-amine Lot # S103111

mTOR activator. Suppresses autophagy by inhibiting the fusion of autophagosomes with lysosomes leading to the accumulation of enlarged autophagosomes.¹ Increases ovarian follicle development.² Displays cellular protective effects from cytotoxic doses of dexamethasone³ or UV radiation⁴. A useful tool for probing the cellular role of mTOR.⁵ Cell permeable.

- 1) Choy et al. (2012), Inhibitory effect of mTOR activator MHY1485 on autophagy: suppression of lysosomal fusion; PLoS One, **7(8)** e43418
- 2) Cheng et al. (2015), Promotion of ovarian follicle growth following mTOR activation: synergistic effects of AKT stimulators; PLoS One, **10(2)** e0117769
- 3) Zhao et al. (2016), MHY1485 activates mTOR and protects osteoblasts from dexamethasone; Biochem. Biophys. Res. Commun., **481** 212
- 4) Yang et al. (2017), MHY1485 ameliorates UV-induced skin cell damages via activating mTOR-Nrf2 signaling Oncotarget, 8 12775
- 5) Li and Siragy (2015), (*Pro*)renin receptor regulates autophagy and apoptosis in podocytes exposed to high glucose; J. Physiol. Endocrinol. Metab., **309** E302

PHYSICAL DATA

Molecular Weight: 387.39

Molecular Formula: $C_{17}H_{21}N_7O_4$ Purity: 98% by TLC

NMR: (Conforms)

Solubility: Soluble in DMSO (up to 20 mg/ml) or in DMF (up to 10 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 1 year from the date of purchase.

Solutions in DMSO or DMF may be stored at -20°C for up to 3 months.

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